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San Juan Bay and Estuary Study: Water Quality Data Collection

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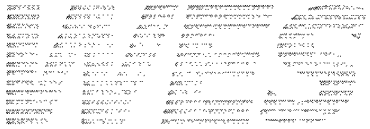

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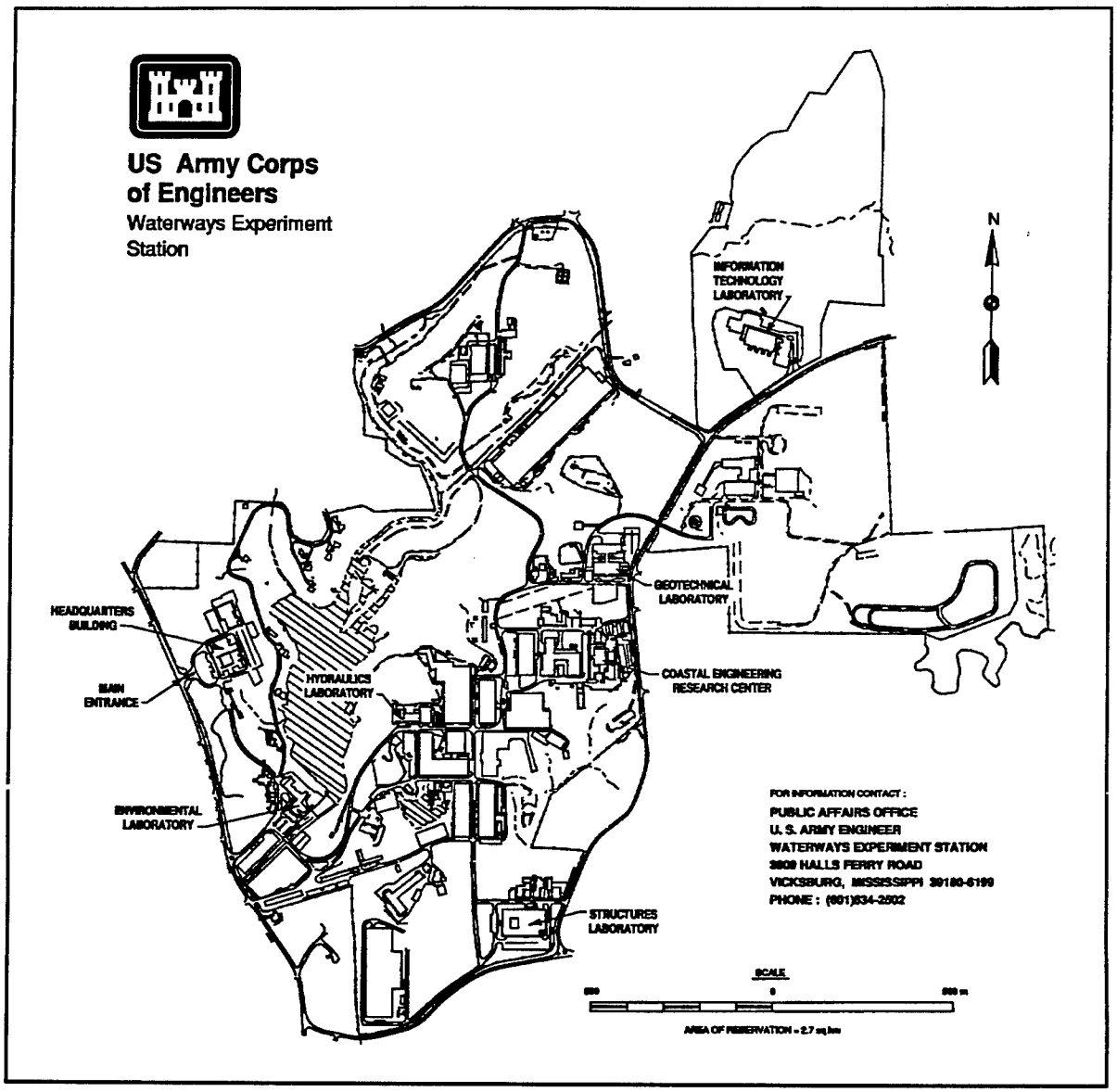

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Contents

Preface

Limnological studies of the San Juan Bay and Estuary, Puerto Rico, were conducted during the period June through September 1995. These studies were part of the United States Environmental Protection Agency's (USEPA) National Estuary Program. The study was managed by the U.S. Army Engineer District, Jacksonville, and was sponsored by the USEPA Region II through San Juan Bay and Estuary Program (SJBEP), San Juan, Puerto Rico. Mr. A. J. Salem was Chief, Planning Division, Jacksonville District. Ms. Susan Osofsky was Project Officer, USEPA, and Ms. Tere Rodriquez was Director, SJBEP.

Dr. Mark S. Dortch, Chief, Water Quality and Contaminant Modeling Branch, Environmental Processes and Effects Division (EPED), Environmental Laboratory (EL), U.S. Army Engineer Waterways Experiment Station (WES), was the study manager. The Principal Investigator for work reported here was Dr. Robert H. Kennedy, Ecosystem Processes and Effects Branch (EPEB), EL. The report was prepared by Dr. Kennedy, Mr. William A. Boyd, and Dr. John J. Hains, EPEB; Messrs. John Lemons and Frank Herrmann, DynTel Corporation, Vicksburg, MS; Mr. David Honnell and Dr. Patrick Howell, AScI Corporation, McLean, VA; Dr. Carl Way and Mr. Felix Fernandez, Barry A. Vittor and Associates, Mobile, AL; Dr. Tina Miller-Way, University of Mobile, Mobile, AL; and Dr. Robert R. Twilley, University of Southwestern Louisiana, Lafayette, LA.

This investigation was performed under the supervision of Dr. John W. Keeley, Director, EL; Mr. Donald L. Robey, Chief, EPED; and Dr. Richard E. Price, Chief, EPEB.

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1 Introduction

San Juan, Puerto Rico, a metropolitan area with a population of approximately one million people, is located on the northeastern coast of the island of Puerto Rico. The metropolitan area encompasses five municipalities, all of which are located within the San Juan Bay and Estuary (SJBE) system. The SBJE consists of five major water bodies (see Figure 1): Bahia de San Juan, Laguna del Condado, Laguna San Jose, Laguna la Torrecilla, and Laguna de Piñones. The bay and lagoons are connected by narrow channels. Laguna San Jose (San Jose Lagoon), the most interior of the lagoons, is characterized by poor flushing.

Much of the SBJE system has been significantly modified by dredging, sand mining, channelization, and sedimentation. In addition, anthropogenic influences from metropolitan areas of San Juan markedly impact water quality. Water quality problems of concern include high concentrations of coliform bacteria, low dissolved oxygen concentrations, eutrophication, and the presence of toxic substances.

The Environmental Quality Board of Puerto Rico obtained funding from the U.S. Environmental Protection Agency's National Estuaries Program to study possible alternatives to improve circulation and water quality in the SJBE. A hydrodynamic and water quality modeling study was subsequently undertaken to evaluate proposed remediation alternatives. The study includes application of numerical hydrodynamic and water quality models, and the collection of supporting data describing water quality and hydrodynamics.

This report describes the water quality data collection program and presents resulting data. The data collection program was designed to estimate material loadings from selected tributary streams, estimate sediment/water interactions, and characterize water column conditions for selected open-water portions of the SJBE system. Data collection efforts included (1) tributary sampling, (2) water column sampling, (3) fecal coliform bacteria enumeration, and (4) sediment/water material flux measurement.

2 Field Sampling Procedures

Tributary Sampling

Tributaries were monitored to characterize material loadings and to establish water quality model boundary conditions. Initial efforts involved weekly monitoring of 8 tributary streams (Table 1; Figure 2). A ninth stream, Rio Puerto Nuevo, was not sampled due to the backwater nature of this site. The study design required weekly monitoring for a period of 8 weeks. Initial sample collection began July 5, 1995.

In situ measurements (temperature, dissolved oxygen, specific conductance, and pH) were taken from a representative location within the stream cross-section. Grab water samples were also collected from a representative location within the stream cross-section.

Stream discharge (m^3/sec) was estimated for three tributaries during each routine sampling event using manual stream gauging methods (World Meteorological Organization 1980). Since successive sampling events included the gaging of different tributaries, each tributary was to be gaged at least twice during the study period. Daily flow measurements for Rio Piedras were obtained from the U.S. Geological Survey gage at Hato Rey (USGS Station Number 50049100).

Identification of the potential impacts of storm-runoff events on water and material loads led to a redesign of the tributary sampling program. The routine weekly monitoring of all tributaries was terminated after the first two sampling events (July 5 and 17, 1995) and the remaining sampling effort was directed at collection of storm runoff on two tributaries, Juan Mendez and Rio Piedras. The sampling site on Juan Mendez was located at Central Avenue; the sampling site on Rio Piedras was located approximately 1 km upstream from the USGS gage at Hato Rey.

Storm event sampling involved collection and storage of multiple samples throughout the storm hydrograph. Following completion of sampling, a subset of samples was saved for subsequent analyses. Samples were chosen so as to adequately represent both the rising and falling portion of the hydrograph.

Water Column Sampling

Water quality samples were collected and *in situ* measurements taken five times at 25 stations distributed throughout the SJBE system (Figure 1; Table 2). All sample locations were determined using a Magellan Promark X Global Positioning System. The five sampling events occurred at intervals of approximately two weeks over a period of eight weeks. Because of logistical considerations, different portions of the system were sampled on consecutive days. Sampling event duration was 3-4 days.

In situ measurements included temperature, pH, specific conductivity or salinity, dissolved oxygen (DO) concentration, Secchi Disk transparency, and water column depth. Temperature, pH, conductivity/salinity, and DO measurements were taken throughout the water column at 1-m intervals at locations having depths less than 10 meters. For stations with depths greater than 10 meters, *in situ* measurements were taken at 2-m intervals. Near surface (0.5 m depth), mid-depth, and near bottom (0.5 m up from bottom) *in situ* measurements were taken at the offshore sampling stations.

Water samples were collected at all sampling stations. Discrete samples were taken at mid-depth for all stations with depths less than 3 meters and near-surface (0.5 m) and near-bottom (0.5 m up from bottom) for all stations with depths greater than 3 meters.

Diel Sampling

Diel *in situ* measurements of DO, temperature, pH, specific conductivity, and turbidity were recorded at 15-minute intervals at two locations in San Jose Lagoon during the period 1200 hr, 23 August 1995, to 1745 hr, 24 August 1995. A recording Hydrolab sonde was deployed at a depth of 1.0 m using an anchor-buoy system at a central location near the highway bridge. A second recording Hydrolab sonde was secured at a depth 0.5 m at a boat dock located along the south shore of the lagoon. Due to equipment failure, data collection at the dock site was terminated at 0915 hr, 24 August 1995. Equipment was calibrated prior to and following deployment. Data were downloaded to a notebook computer following equipment retrieval.

Sediment-Water Flux Sampling

Core samples were collected and returned to a field laboratory for incubation and analysis. Intact sediment-water microcosms were collected at eight stations (Figure 3; Table 3) during the period 10-14 August, 1995, by SCUBA divers. At each site, three 5-inch diameter acrylic sample cores were collected. Difficulties in obtaining samples were encountered at stations in San Jose Lagoon due to the presence of large rafts of bivalves, identified as

Perna perna (Per. Comm., D. Sheldon, Barry A. Vittor and Associates, Mobile, AL). Locations of these stations were adjusted to avoid bivalve shells.

Approximately 70 liters of overlying water were also collected using a submersible pump. Care was taken to minimize aeration during sample collection and transport. A light profile was recorded using a LiCor light meter at the two stations (SJW5/6 and PL9/10) for which coincident light and dark incubations were to be performed.

3 Sample Collection, Handling and Preservation Procedures

Water Samples

Water samples were obtained at all stations using a bilge pump. Samples were obtained from mid-depth for all open-water stations with depths less than three meters, and near-surface (0.5 m) and near-bottom (0.5 m up from bottom) for all stations with depths greater than three meters.

Water was initially retained in rinsed, 1-liter polyethylene (PPE) bottles (3 bottles/station), placed on ice, and stored in the dark. An appropriate fraction of each sample was filtered (0.45-μm membrane) and stored in PPE and amber glass bottles within 6 hours of collection. The remaining unfiltered fraction was stored in PPE and amber glass bottles. Samples for selected analyses were acidified with 1:1 H_2SO_4 to pH <2. Sample water were filtered (Gelman A/E) for pigment analyses; filter pads were stored in polystyrene petri dishes and frozen. All samples were stored in coolers, refrigerated with ice packs, and shipped via overnight delivery to the analytical laboratories. Sample handling and preservation procedures for water samples are presented in Table 4.

Fecal Coliform Bacteria Samples

Grab samples for fecal coliform bacteria enumeration were obtained at all water column and tributary stations. Samples were collected in 300-ml whirl-pak containers and immediately placed on ice in the dark. Samples were delivered to Environmental Quality Laboratory, San Juan, Puerto Rico, for bacterial enumeration within 6 hours of collection.

Sediment-Water Flux Samples

Care was taken to ensure that approximately 2 L of overlying water was retained in each core following collection. Cores were capped, placed in coolers to minimize light exposure and temperature changes, and returned to the field laboratory.

All water samples collected coincident with core collection were stored in cubitainers for transport to the laboratory in coolers. Samples collected in the laboratory during incubations were handled and preserved using procedures identified in Table 5.

4 Analytical Procedures

Water Samples

Laboratory equipment and instruments used for analyses included a Water's HPLC System with an anion column, a Shimadzu UV160 double-beam spectrophotometer, a Shimadzu Carbon Analyzer, an Orion 940 expandable ion analyzer in conjunction with specific-ion-electrode methods, an OIC bench top centrifuge, a Lindberg Blue M Model OV480A drying oven, and various analytical electronic balances. All equipment and instruments were calibrated prior to use, and checked periodically for baseline drift.

Chemical and physical analyses follows standard methods (American Public Health Association 1992); pigment analyses followed methods described by Strickland and Parsons (1972). Specific analytical procedures are listed in Table 6.

Quality Control (QC) included the analysis of 10% of the total number of samples collected. In addition, for each collection set analyzed, blanks, blank spikes and sample spikes were analyzed. If erroneous results occurred with the QC samples, analysis was halted until proper corrective action was taken. When necessary, samples were reanalyzed.

Fecal Coliform Bacteria Enumeration

Fecal coliform bacteria enumeration was performed by the membrane filtration method in accordance with standard methods (American Public Health Association 1992).

Sediment-Water Flux Measurements

Sediment-water material fluxes were measured using short term incubations of intact core samples. Fluxes were estimated based on changes in DO, ammonia, nitrate-nitrite, and phosphate concentrations of water overlying each

core. Specific analytical procedures for estimating these variables are listed in Table 7.

Cores were carefully flushed with approximately 20 L of overlying water in the laboratory. Flushing rates were such that the sediment-water interface remained undisturbed. The cores were then be capped and the overlying water sampled for chemical analyses. A water-filled core (blank) was used to correct for water column changes not related to sediment-water exchanges. Sampling of the cores followed a standard static (batch) protocol with 5 samples equally spaced in time over the 6-hour incubation period.

Incubations were conducted in a circulating water bath in the dark with the exception of samples collected at SJW5/6 and PL9/10, which were also incubated in the light. Light levels for the latter incubations were adjusted to ambient levels (measured in the field at the time of sample collection) using multiple layers of shade cloth. Light levels were continuously monitored during incubation using a LiCor light meter with the underwater sensor located in the incubation chamber.

Thirty-milliliter samples were collected from the overlying water column in each core prior to incubation and at equal intervals throughout the incubation for chemical analyses. An initial 60-ml sample was also withdrawn for determination of dissolved oxygen. Withdrawn water was replaced with an equal volume of bottom water collected at each corresponding sample site.

Flux rates were determined using a regression approach in which the slope of the change in concentration versus time estimates the flux rate. The slope from the "blank" core was subtracted from the slope of each core. The flux, in umols/m^2/h was calculated as:

(slope - blank slope)(umols/L/min)*60(min/h)*depth(m)*1000(L/m^3)

where:

depth = [total water volume in core (ml)/core area (cm^2)]/100(cm/m)

If the concentration change during the incubation period was less than 2 times the standard deviation of analyses of standards, the flux was reported as zero. If the concentration was greater than 2 times the standard deviation but the regression was not statistically significant, the flux was reported as non-interpretable. Individual fluxes were calculated for each of three replicate cores and then averaged to yield a mean flux estimate.

5 Data Management

Field and laboratory data were reviewed for completeness and entered into a database. Data files were reviewed by the collecting or analyzing investigator to insure accuracy. Data files were created and stored in three formats; Excel spread sheets, comma-delimited ASCII text and SAS datasets. Resulting data are presented in the following appendices:

Appendix A	Sample station locations
Appendix B	In situ data for tributary and open-water sampling stations
Appendix C	Water chemistry and biological data for tributary and open-water sampling stations
Appendix D	Sediment-water flux data
Appendix E	QA/QC data for laboratory analyses
Appendix F	Glossary of variable names

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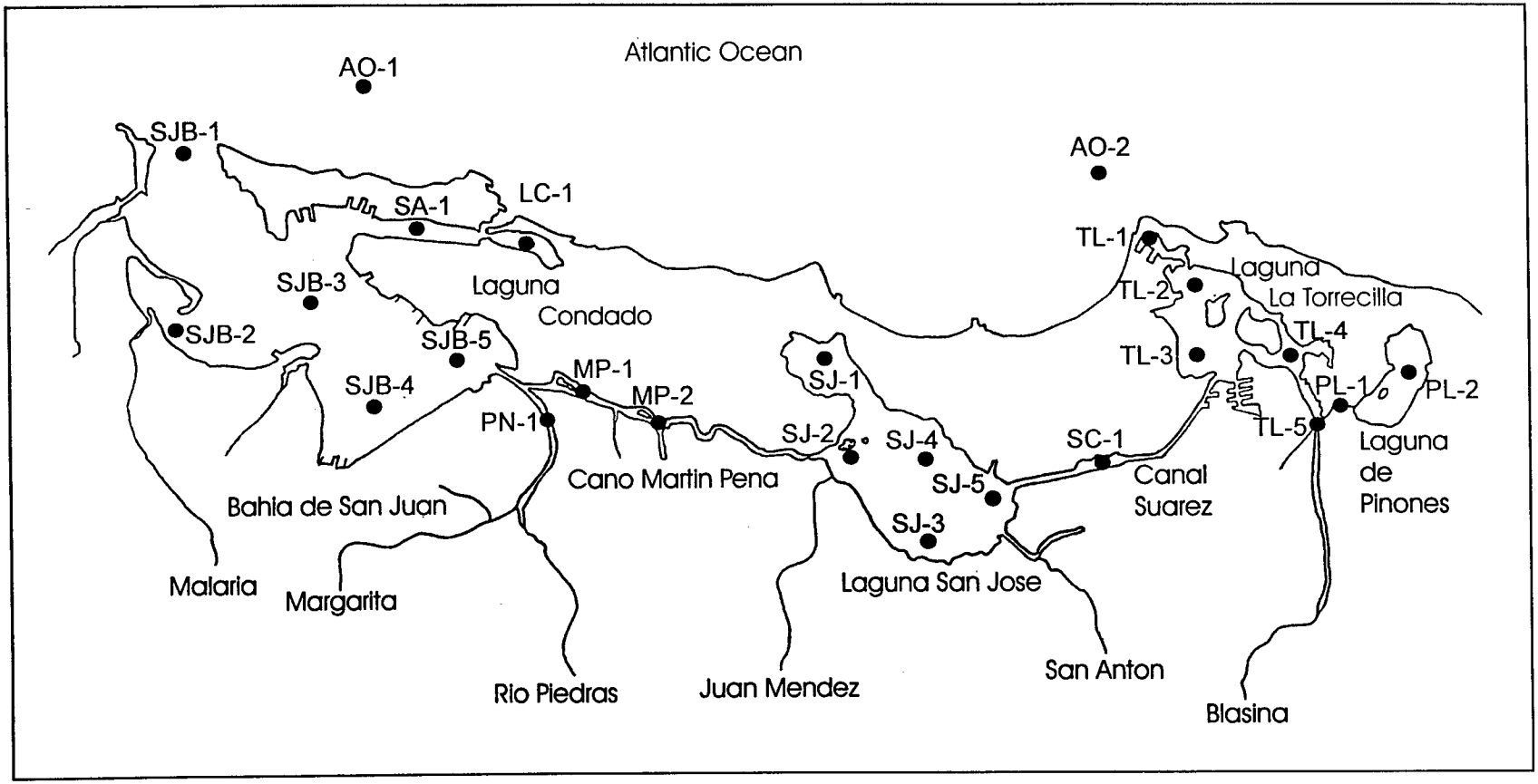

Figure 1. Map of the San Juan Bay and Estuary system, San Juan, Puerto Rico. Closed circles indicate location of open-water sampling locations

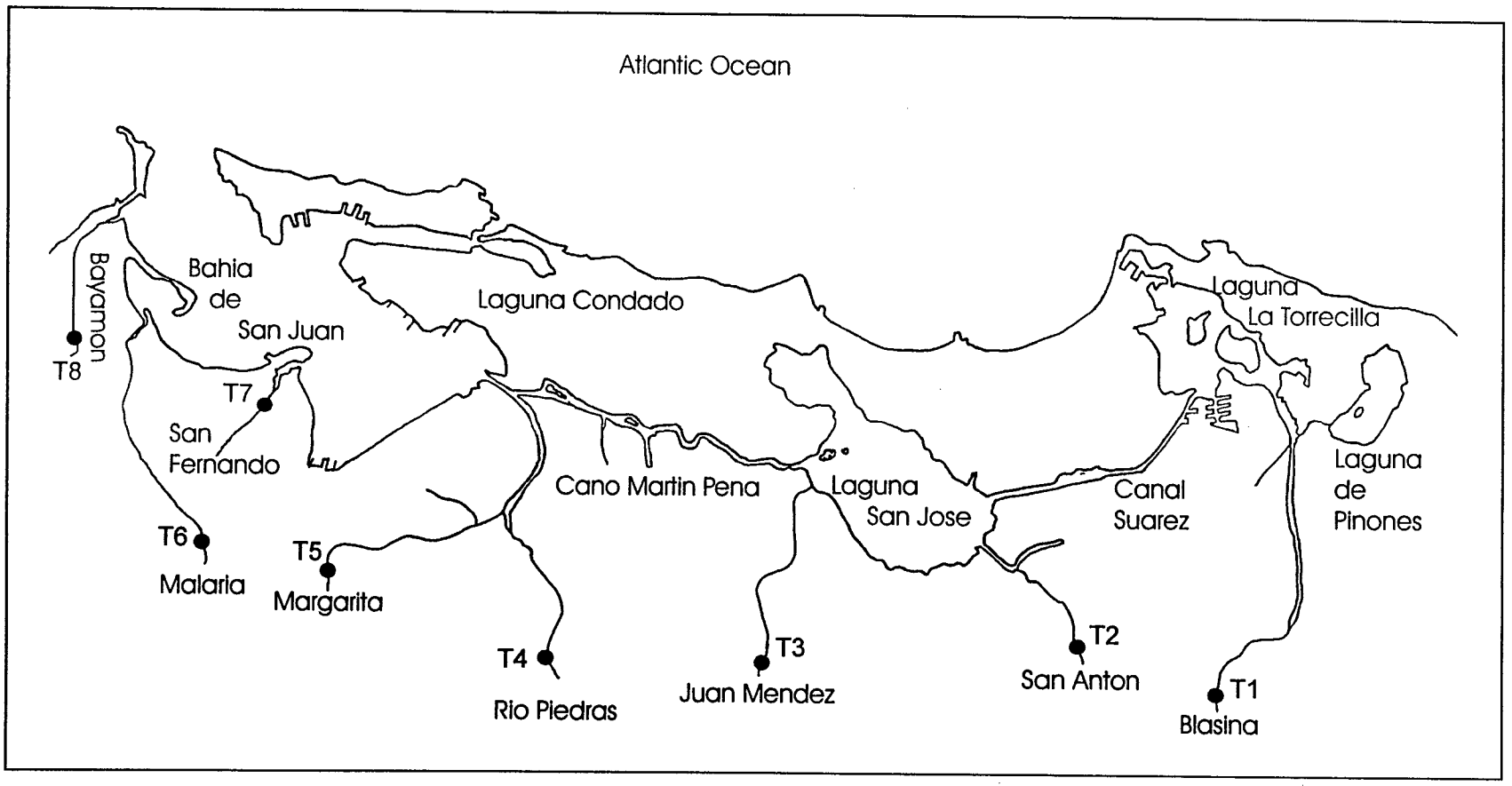

Figure 2. Map of the San Juan Bay and Estuary system, San Juan, Puerto Rico. Closed circles indicate location of tributary water quality sampling locations

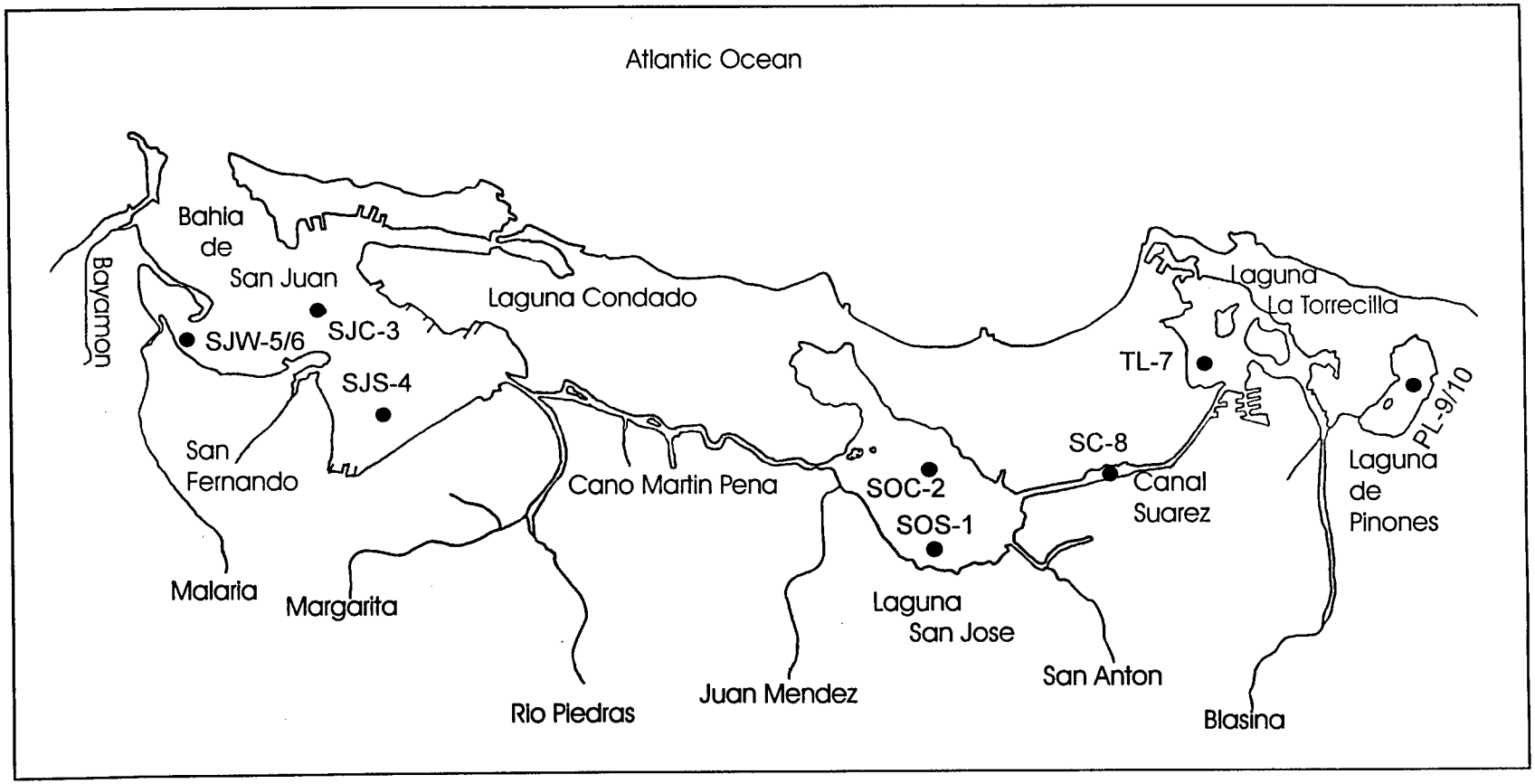

Figure 3. Map of the San Juan Bay and Estuary system, San Juan, Puerto Rico. Closed circles indicate location of sediment-water flux sampling locations

Table 1.
Tributary Water Quality Sampling Locations

ID	Tributary Name	Location
T1	Blasina Canal	Hwy. 3 (65 De Infanteria Ave.), next to Carolina Regional Hospital
T2	Quebrada San Anton	Bustamante Street and Garcilaso Street; Carolina
T3	Quebrada Juan Mendez	Hwy. 17 (Piñero Ave.); near Balbosa Ave. Exit, Rio Piedras
T4	Rio Piedras	Pascasio Sancerrit Bridge, Notre Dame Street, Rio Piedras
T5	Quebrada Margarita	Ebano Street; Guaynabo
T6	Malaria Canal	Hwy. 28; Pueblo Viejo; by Fort. Buchanan; Guaynabo
T7	Quebrada San Fernando	Discharge pipe onto San Juan Bay; Cataño
T8	Rio de Bayamon	Hwy. 869; Cataño

Table 2.
Water Column Sampling Locations

ID	Station Description
AO1	Atlantic Ocean offshore, west
AO2	Atlantic Ocean offshore, east
LC1	Mid Laguna del Condado
MP1	Martin Pena Canal, west end, near highway 22 bridge
MP2	Martin Pena Canal, mid-length, near highway 1 bridge
PL1	Mid-length of canal to Pinones Lagoon
PL2	Central Pinones Lagoon
PN1	Rio Puerto Nuevo Channel
SA1	Mid San Antonio Canal near cruise ship berths
SC1	Suarez Canal, midlength
SJ1	Mid Los Corozos Lagoon
SJ2	West San Jose Lagoon off of Martin Pena Canal
SJ3	South San Jose Lagoon
SJ4	Central San Jose Lagoon
SJ5	East San Jose Lagoon off of Suarez Canal
SJB1	Northwestern San Juan Bay, in channel inside bay entrance
SJB2	Northwestern San Juan Bay, between Bayview and man-made peninsula
SJB3	Central, mid-bay of San Juan Bay
SJB4	Southeastern San Juan Bay, mid-bay south of the airport
SJB5	San Juan Bay near mouth of Martin Pena Canal
TL1	Torrecilla Lagoon inside ocean outlet
TL2	Torrecilla Lagoon northwest of Punta Larga
TL3	Southwest Torrecilla Lagoon
TL4	Torrecilla Lagoon southeast of Punta Mosquitos
TL5	Mouth of Blasina Canal

Table 3.
Sediment-water Flux Sampling Stations

ID	Station Description
SJC3	Central San Juan Bay
SJS4	Southeastern San Juan Bay, mid-bay south of the airport
SJW5/6	Western San Juan Bay
SOS1	South San Jose Lagoon
SOC2	Central San Jose Lagoon
SC8	Suarez Canal, midlength
TL7	Southwest Torrecilla Lagoon
PL9/10	Central Pinones Lagoon

Table 4.
Water Sample Handling and Preservation

Sample Matrix	Sample Volume	Sample Container	Analyte	Sample Handling and Preservation	Max. Holding Time
Water	In situ	In situ	Temperature	None	None
Water	In situ	In situ	pH	None	None
Water	In situ	In situ	Dissolved Oxygen	None	None
Water	In situ	In situ	Conductivity	None	None
Water	250 mL	PPE	Ammonia-N	H_2SO_4 to pH<2; refrigerate	48 hours
Water	250 mL	PPE	Nitrate-N	Filter 0.45μ; refrigerate	48 hours
Water	250 mL	PPE	TKN	H_2SO_4 to pH<2; refrigerate	7 days
Water	250 mL	PPE	Dissolved TKN	Filter 0.45μ; H_2SO_4 to pH<2; refrigerate	48 hours
Water	250 mL	PPE	Total Phosphorus	H_2SO_4 to pH<2; refrigerate	48 hours
Water	250 mL	PPE	Total Dissolved Phosphorus	Filter 0.45μ; H_2SO_4 to pH<2; refrigerate	48 hours
Water	250 mL	PPE	Total Inorganic Phosphorus	H_2SO_4 to pH<2; refrigerate	48 hours
Water	250 mL	PPE	Dissolved Inorganic Phosphorus	Filter 0.45μ; H_2SO_4 to pH<2; refrigerate	48 hours

(Continued)

Table 4. (Concluded)

Sample Matrix	Sample Volume	Sample Container	Analyte	Sample Handling and Preservation	Max. Holding Time
Water	500 mL	PPE	Volatile Suspended Solids	Refrigerate	2-7 days
Water	500 mL	PPE	Total Suspended Solids	Refrigerate	2-7 days
Water	500 mL	Amber Glass	Total Organic Carbon	Refrigerate	48 hours
Water	500 mL	Amber Glass	Dissolved Organic Carbon	Filter PC glass filter; refrigerate	48 hours
Water	1000 mL	PPE	Chlorophyll *a*	Refrigerate; dark	30 days
Water	300 mL	Sterile Whirlpacks	Fecal Coliform	Refrigerate	24 hours
Water	50 mL	Field Analysis	Sulfide*	None	None

Table 5.
Sediment-water Flux Sample Handling and Preservation

Sample Matrix	Sample Volume	Sample Container	Analyte	Max. Holding Time	Preservation Method
Water	5 ml	AA vial	Ammonia-N	60 days	Freeze
Water	5 ml	AA vial	Nitrate-N	60 days	Freeze
Water	5 ml	AA vial	Nitrite-N	60 days	Freeze
Water	5 ml	AA vial	Ortho Phosphate	60 days	Freeze
Water	60 ml	60-ml BOD bottle	Dissolved Oxygen	None	None

Table 6.
Water Sample Analytical Procedures

Sample Matrix	Analyte (Units)	Method	Reference and Procedure	Detection Limit	Estimated Accuracy[1]	Estimated Precision[1]
Water	Temperature (°C)	Hydrolab Reporter / thermistor	APHA 1992 2550-B	0.05°C	±0.15	±0.15
Water	pH (units)	Hydrolab Reporter / electrode	APHA 1992 4500-H^+-B	0.01 Units	±0.1	±0.01
Water	Conductivity ($\mu S\ cm^{-1}$)	Hydrolab Reporter / electrode	APHA 1992 2510-B	0.001 $\mu S\ cm^{-1}$	±0.015	±1%
Water	Dissolved Oxygen ($mg\ l^{-1}$)	Hydrolab Reporter / electrode	APHA 1992 4500-O-G	0.01 $mg\ l^{-1}$	±0.1	±0.05%
Water	Transparency (cm)	Secchi disk	Carlson 1995	0.1 cm	TBD[1]	TBD[1]
Water	Ammonia-N ($mg\ l^{-1}$)	Specific ion electrode	APHA 1992 4500-NH_3- F	0.01 $mg\ l^{-1}$	±0.05	±0.05
Water	Nitrate-N ($mg\ l^{-1}$)	HPLC	APHA 1992 4500-NO_3- C	0.01 $mg\ l^{-1}$	±0.1	±0.01
Water	TKN ($mg\ l^{-1}$)	Selective ion electrode	APHA 1992 4500-N_{org} -B	0.1 $mg\ l^{-1}$	±0.1	±0.1
Water	Dissolved TKN ($mg\ l^{-1}$)	Selective ion electrode	APHA 1992 4500-N_{org}- B	0.1 $mg\ l^{-1}$	±0.1	±0.1

Table 6.
Water Sample Analytical Procedures

Sample Matrix	Analyte (Units)	Method	Reference and Procedure	Detection Limit	Estimated Accuracy[1]	Estimated Precision[1]
Water	Total Phosphorus (mg l^{-1})	Digest / spectrometry	APHA 1992 4500-P B.1	0.02 mg l^{-}	±0.1	±0.01
Water	Total Dissolved Phosphorus (mg l^{-1})	Digest / spectrometry	APHA 1992 4500-P B.1	0.02 mg l^{-}	±0.1	±0.01
Water	Total Inorganic Phosphorus (mg l^{-1})	Hydrolysis / spectrometry	APHA 1992 4500-P B.2	0.02 mg l^{-}	±0.1	±0.01
Water	Dissolved Inorganic Phosphorus (mg l^{-1})	Hydrolysis / spectrometry	APHA 1992 4500-P B.2	0.02 mg l^{-}	±0.1	±0.01
Water	Total Suspended Solids (mg l^{-1})	Dried @ 105°C	APHA 1992 2540-D	1 mg l^{-1}	± 1.0	±0.01
Water	Volatile Suspended Solids (mg l^{-1})	Ignited @ 550°C	APHA 1992 2540 E	1 mg l^{-1}	± 1.0	±0.01
Water	Total Organic Carbon (mg l^{-1})	Combust / IR	APHA 1992 5310-B	0.2 mg l^{-1}	TBD	TBD
Water	Dissolved Organic Carbon (mg l^{-1})	Combust / IR	APHA 1992 5310-B	0.2 mg l^{-1}	TBD	TBD
Water	Chlorophyll *a* (mg/m^3)	90% Acetone Extract	APHA 1992 10200 H	2 mg/m^3	± 2.0	±0.10

Table 6.
Water Sample Analytical Procedures

Sample Matrix	Analyte (Units)	Method	Reference and Procedure	Detection Limit	Estimated Accuracy[1]	Estimated Precision[1]
Water	Fecal Coliform (MPN/100 ml)	Membrane filter	APHA 1992 9222 D			
Water	Sulfide (mg l^{-1})	Spectrometry Field Kit	APHA 1992 4500-S^{2-}D	0.5	TBD	TBD

[1]TBD indicates that sufficient data for an estimate have not yet been gathered by the LAERF laboratory to make estimates. Goals for accuracy and precision are those indicated in American Public Health Association (1992; APHA)

Table 7.
Sediment-Water Flux Analytical Procedures

Sample Matrix	Analyte (Units)	Method	Reference	Detection Limit	Estimated Accuracy	Estimated Precision [a]
Water	Dissolved Oxygen	Polarigraph electrode	APHA, 1992	0.01 mg /l	0.01 mg/l	0.005mg/l
Water	Ammonia-N	Colorimetric	Solorzano, 1969	0.05 ug-at/l	0.15 ug-at/l	0.08/(n(.5))
Water	Nitrate-N	Colorimetric	Strickland and Parsons, 1972	0.05 ug-at/l	0.10 ug-at/l	0.5/(n(.5))
Water	Nitrite-N	Colorimetric	Strickland and Parsons, 1972	0.05 ug-at/l	0.025 ug-at/l	0.03/(n(.5))
Water	Ortho Phosphate	Colorimetric	Strickland and Parsons, 1972	0.05 ug-at/l	0.03 ug-at/l	0.03/(n(.5))

[a] Where n = number of replicate samples analyzed

Appendix A
Sample Station Locations

Table A1
Water Column Sample Station Locations

Station	LATDIR	LATDEG	LATMIN	LONDIR	LONDEG	LONMIN
AO-1	N	18	28.9	W	66	6.5
AO-2	N	18	28.03	W	65	59.96
SJB-1	N	18	28.18	W	66	7.73
SJB-2	N	18	26.77	W	66	7.94
SJB-3	N	18	26.8	W	66	6.59
SJB-4	N	18	26.33	W	66	6.32
SJB-5	N	18	26.63	W	66	5.35
SA-1	N	18	27.61	W	66	5.88
LC-1	N	18	27.26	W	66	4.56
PN-1	N	18	26.1	W	66	4.66
MP-1	N	18	26.23	W	66	4.34
MP-2	N	18	25.95	W	66	3.71
SJ-1	N	18	26.46	W	66	2.17
SJ-2	N	18	25.72	W	66	2.11
SJ-3	N	18	25.07	W	66	1.58
SJ-4	N	18	25.61	W	66	1.47
SJ-5	N	18	25.42	W	66	0.71
SC-1	N	18	25.62	W	65	59.91
TL-1	N	18	27.5	W	65	59.62
TL-2	N	18	27.03	W	65	59.01
TL-3	N	18	26.61	W	65	59.11
TL-4	N	18	26.47	W	65	58.25
TL-5	N	18	25.97	W	65	58.03
PL-1	N	18	26.06	W	65	57.89
PL-2	N	18	26.34	W	65	57.21

Table A2
Sediment-water Flux Sample Station Locations

Station	LATDIR	LATDEG	LATMIN	LONDIR	LONDEG	LONMIN	INCUB
SOS-1	N	18	24.9	W	66	0.86	Dark
SOC-2	N	18	25.78	W	66	1.46	Dark
SJC-3	N	18	26.92	W	66	6.62	Dark
SJS-4	N	18	26.06	W	66	6.45	Dark
SJW-5	N	18	26.76	W	66	7.93	Light
SJW-6	N	18	26.76	W	66	7.93	Dark
TL-7	N	18	26.52	W	65	59.05	Dark
SC-8	N	18	25.63	W	65	59.7	Dark
PL-9	N	18	26.24	W	65	57.27	Light
PL-10	N	18	26.24	W	65	57.27	Dark

Appendix B
In Situ Data for Tributary and Open-water Sampling Stations

Table B1
In Situ Data for Water Column Sampling Stations

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
AO-1	6	26	95	1	1	1	0.5	20.8	28.42	8.35	6.16	37.8	.	804
AO-1	6	26	95	1	1	1	10	20.8	28.02	8.36	6.28	37.8	.	804
AO-1	6	26	95	1	1	1	20.8	20.8	28	8.35	6.17	37.9	.	804
AO-2	6	26	95	1	1	1	0.5	16.5	28.17	8.31	5.76	37.9	.	750
AO-2	6	26	95	1	1	1	8	16.5	27.98	8.35	6.09	37.9	.	750
AO-2	6	26	95	1	1	1	16.4	16.5	27.94	8.33	5.84	37.9	.	750
LC-1	6	29	95	1	1	1	0.5	2.3	30.34	8.28	5.46	37.1	.	1051
LC-1	6	29	95	1	1	1	1	2.3	30.33	8.28	5.45	37.1	.	1051
LC-1	6	29	95	1	1	1	2	2.3	30.27	8.28	5.35	37.2	.	1051
LC-1	6	29	95	1	1	1	3	2.3	30.08	8.27	4.96	37.1	.	1051
LC-1	6	29	95	1	1	1	4	2.3	29.95	8.24	4.54	37.2	.	1051
LC-1	6	29	95	1	1	1	5	2.3	29.98	8.24	4.6	37.1	.	1051
LC-1	6	29	95	1	1	1	6	2.3	29.86	8.16	3.57	37.2	.	1051
LC-1	6	29	95	1	1	1	7	2.3	29.76	8.02	1.06	37.1	.	1051
LC-1	6	29	95	1	1	1	8.2	2.3	29.48	7.93	0.04	37.2	.	1051
MP-1	6	27	95	1	1	1	0.5	0.6	31.04	8.15	8.03	19.4	.	1030
MP-1	6	27	95	1	1	1	1	0.6	30.12	8.14	2.41	35.6	.	1030
MP-1	6	27	95	1	1	1	2	0.6	28.97	7.87	0.07	36.9	.	1030

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
MP-1	6	27	95	1	1	1	3	0.6	28.88	7.81	0.52	37	.	1030
MP-2	6	27	95	1	1	1	0.5	0.4	31.89	8.18	9.24	25.5	12	1050
MP-2	6	27	95	1	1	1	1	0.4	30.32	8.16	2.01	35.3	12	1050
MP-2	6	27	95	1	1	1	2	0.4	28.91	7.23	0.04	36.7	12	1050
MP-2	6	27	95	1	1	1	3	0.4	28.62	7.49	0.07	36.9	12	1050
MP-2	6	27	95	1	1	1	3.5	0.4	28.62	7.52	0.79	37	12	1050
PL-1	6	28	95	1	1	1	0.5	0.4	32.08	8.05	3.06	28.4	.	1100
PL-1	6	28	95	1	1	1	1	0.4	32	8.01	3.09	29.7	.	1100
PL-2	6	28	95	1	1	1	0.5	0.2	31.91	8.64	5.43	28.8	5	1041
PL-2	6	28	95	1	1	1	1	0.2	31.74	8.61	5.02	28.8	5	1041
PN-1	6	27	95	1	1	1	0.5	0.8	29.94	7.92	1.03	33.5	.	955
PN-1	6	27	95	1	1	1	1	0.8	29.31	8	2.35	36.4	.	955
PN-1	6	27	95	1	1	1	2	0.8	29.04	7.97	2.09	36.7	.	955
SA-1	6	26	95	1	1	1	0.5	1.8	29.46	8.51	9.78	37.5	.	1130
SA-1	6	26	95	1	1	1	2	1.8	29.31	8.5	8.76	37.5	.	1130
SA-1	6	26	95	1	1	1	4	1.8	28.7	8.28	5.06	37.6	.	1130
SA-1	6	26	95	1	1	1	6	1.8	28.54	8.22	3.86	37.7	.	1130
SA-1	6	26	95	1	1	1	8	1.8	28.47	8.19	3.63	37.6	.	1130
SA-1	6	26	95	1	1	1	10	1.8	28.44	8.17	3.15	37.7	.	1130
SA-1	6	26	95	1	1	1	12	1.8	28.35	8.12	2.5	37.5	.	1130
SA-1	6	26	95	1	1	1	12.4	1.8	28.35	8.11	2.23	37.7	.	1130
SC-1	6	28	95	1	1	1	0.5	1.2	31.25	8.2	6.82	15	.	935
SC-1	6	28	95	1	1	1	1	1.2	31.11	8.19	6.02	15.4	.	935
SC-1	6	28	95	1	1	1	2	1.2	31.77	8.08	4.18	24.7	.	935
SC-1	6	28	95	1	1	1	3	1.2	31.24	7.88	2.03	28.2	.	935

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SC-1	6	28	95	1	1	1	4	1.2	31.03	7.76	0.12	28.6	.	935
SC-1	6	28	95	1	1	1	5	1.2	30.91	7.83	0.02	29.2	.	935
SC-1	6	28	95	1	1	1	6	1.2	29.74	7.29	0.03	31	.	935
SC-1	6	28	95	1	1	1	7	1.2	29.23	7.18	0.04	31.2	.	935
SC-1	6	28	95	1	1	1	8	1.2	28.99	7.13	0.05	31.4	.	935
SC-1	6	28	95	1	1	1	8.8	1.2	28.87	7.12	0.14	31.4	.	935
SJ-1	6	28	95	1	1	1	0.5	0.8	30.63	8.37	6.18	13.5	.	755
SJ-1	6	28	95	1	1	1	1	0.8	30.65	8.35	6.17	13.5	.	755
SJ-1	6	28	95	1	1	1	2	0.8	31.73	7.66	1.3	16	.	755
SJ-2	6	28	95	1	1	1	0.5	1	30.73	8.07	4.77	13.3	.	825
SJ-2	6	28	95	1	1	1	1	1	30.69	8.1	4.6	13.6	.	825
SJ-3	6	28	95	1	1	1	0.5	1.6	31.2	8.34	5.92	13.8	.	840
SJ-3	6	28	95	1	1	1	1	1.6	31.2	8.33	5.72	13.8	.	840
SJ-3	6	28	95	1	1	1	2	1.6	31.61	7.76	4.68	15	.	840
SJ-4	6	28	95	1	1	1	0.5	0.8	30.91	8.56	7.58	14.1	.	855
SJ-4	6	28	95	1	1	1	1	0.8	30.83	8.55	7.29	14	.	855
SJ-4	6	28	95	1	1	1	2	0.8	30.95	8.22	4.13	14.8	.	855
SJ-5	6	28	95	1	1	1	0.5	1.3	30.79	8.48	7.68	14	.	910
SJ-5	6	28	95	1	1	1	1	1.3	30.77	8.45	6.35	14.1	.	910
SJ-5	6	28	95	1	1	1	2	1.3	31.94	7.77	2.13	17.2	.	910
SJ-5	6	28	95	1	1	1	3	1.3	31.44	7.73	0.85	26.5	.	910
SJ-5	6	28	95	1	1	1	4	1.3	30.22	7.15	0.01	28.7	.	910
SJ-5	6	28	95	1	1	1	5	1.3	29.56	7.09	0.28	29.2	.	910
SJ-5	6	28	95	1	1	1	6	1.3	29.44	7.08	0.03	29.5	.	910
SJ-5	6	28	95	1	1	1	6.8	1.3	29.29	7.11	0.37	30	.	910

Sheet 3 of 23

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJB-1	6	26	95	1	1	1	0.5	3.5	31.18	8.36	5.92	37.3	.	908
SJB-1	6	26	95	1	1	1	2.5	3.5	29.34	8.37	6.02	37.6	.	908
SJB-1	6	26	95	1	1	1	4.5	3.5	28.42	8.36	6	37.7	.	908
SJB-1	6	26	95	1	1	1	6.5	3.5	28.27	8.35	5.95	37.6	.	908
SJB-1	6	26	95	1	1	1	8.5	3.5	28.98	8.36	6.04	37.6	.	908
SJB-1	6	26	95	1	1	1	10.5	3.5	28.35	8.35	5.93	37.7	.	908
SJB-1	6	26	95	1	1	1	12.5	3.5	28.03	8.35	5.89	37.7	.	908
SJB-1	6	26	95	1	1	1	14.5	3.5	28	8.34	5.86	37.7	.	908
SJB-2	6	26	95	1	1	1	0.5	0.5	30.59	8.39	5.85	36.5	.	940
SJB-2	6	26	95	1	1	1	1	0.5	30.56	8.39	5.82	36.7	.	940
SJB-2	6	26	95	1	1	1	1.8	0.5	29.98	8.28	4.38	37.4	.	940
SJB-3	6	26	95	1	1	1	0.5	2.5	30.15	8.43	7.39	37.3	0	1005
SJB-3	6	26	95	1	1	1	2	2.5	29.27	8.44	7.59	37.5	0	1005
SJB-3	6	26	95	1	1	1	4	2.5	29.01	8.41	6.78	37.6	0	1005
SJB-3	6	26	95	1	1	1	6	2.5	28.81	8.34	5.58	37.6	0	1005
SJB-3	6	26	95	1	1	1	8	2.5	28.59	8.31	5.15	37.6	0	1005
SJB-3	6	26	95	1	1	1	10	2.5	28.46	8.28	4.62	37.7	0	1005
SJB-3	6	26	95	1	1	1	11.6	2.5	29.29	8.2	3.58	37.7	0	1005
SJB-4	6	26	95	1	1	1	0.5	1.2	30.22	8.56	11.5	37.3	.	1031
SJB-4	6	26	95	1	1	1	1	1.2	30.2	8.56	11.13	37.2	.	1031
SJB-4	6	26	95	1	1	1	2	1.2	29.32	8.3	5.46	37.3	.	1031
SJB-4	6	26	95	1	1	1	2.5	1.2	29.13	8.29	5.34	37.3	.	1031
SJB-5	6	26	95	1	1	1	0.5	1.6	30.14	8.59	11.68	36.7	.	1055
SJB-5	6	26	95	1	1	1	1	1.6	30.12	8.6	11.5	36.7	.	1055
SJB-5	6	26	95	1	1	1	3	1.6	29.03	8.36	6.05	37.5	.	1055

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJB-5	6	26	95	1	1	1	5	1.6	28.72	8.35	5.62	37.6	.	1055
SJB-5	6	26	95	1	1	1	7	1.6	28.54	8.29	4.55	37.7	.	1055
SJB-5	6	26	95	1	1	1	9	1.6	28.23	8.22	3.78	37.6	.	1055
SJB-5	6	26	95	1	1	1	10.9	1.6	28.23	8.19	3.42	37.6	.	1055
TL-1	6	26	95	1	1	1	0.5	1	29.01	8.24	5.25	35.3	.	715
TL-1	6	26	95	1	1	1	1	1	28.36	8.3	5.81	37.5	.	715
TL-1	6	26	95	1	1	1	2	1	28.44	8.29	5.8	37.4	.	715
TL-1	6	26	95	1	1	1	3	1	28.44	8.3	5.83	37.7	.	715
TL-1	6	26	95	1	1	1	3.2	1	28.42	8.27	5.79	37.6	.	715
TL-2	6	29	95	1	1	1	0.5	0.7	29.58	8.23	5.11	32.2	.	855
TL-2	6	29	95	1	1	1	1	0.7	29.6	8.23	4.81	32.4	.	855
TL-2	6	29	95	1	1	1	1.3	0.7	29.83	8.17	4.62	34.7	.	855
TL-3	6	29	95	1	1	1	0.5	0.8	29.54	8.24	5.14	32.3	.	820
TL-3	6	29	95	1	1	1	1	0.8	29.58	8.23	4.74	32.5	.	820
TL-3	6	29	95	1	1	1	1.2	0.8	30.08	8.16	3.42	34.2	.	820
TL-4	6	29	95	1	1	1	0.5	0.6	30.69	8.04	3.17	28.6	.	740
TL-4	6	29	95	1	1	1	2	0.6	29.92	7.86	0.03	35.6	.	740
TL-4	6	29	95	1	1	1	4	0.6	29.58	7.92	0.04	36.1	.	740
TL-4	6	29	95	1	1	1	6	0.6	27.75	7.27	0.04	36.3	.	740
TL-4	6	29	95	1	1	1	8	0.6	27.38	7.23	0.04	36.4	.	740
TL-4	6	29	95	1	1	1	10	0.6	27.13	7.18	0.04	36.3	.	740
TL-4	6	29	95	1	1	1	12	0.6	27.1	7.15	0.05	36.4	.	740
TL-4	6	29	95	1	1	1	13.5	0.6	27.1	7.14	0.07	36.3	.	740
TL-5	6	28	95	1	1	1	0.5	0.4	33.05	7.98	4.58	19.6	.	1120
TL-5	6	28	95	1	1	1	1	0.4	31.96	8.02	2.4	32.7	.	1120

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
TL-5	6	28	95	1	1	1	1.5	0.4	31.46	7.86	0.89	34.3	.	1120
AO-1	7	10	95	2	1	1	0.5	21.3	28.25	8.43	6.08	36.6	.	840
AO-1	7	10	95	2	1	1	10.5	21.3	28.15	8.42	5.97	36.6	.	840
AO-1	7	10	95	2	1	1	21.3	21.3	28.02	8.42	5.87	36.6	.	840
AO-2	7	10	95	2	1	1	0.5	21.5	28.29	8.42	6.2	36.5	.	800
AO-2	7	10	95	2	1	1	10.5	21.5	28.02	8.42	6.2	36.7	.	800
AO-2	7	10	95	2	1	1	21.5	21.5	27.98	8.41	6.07	36.6	.	800
LC-1	7	13	95	2	1	1	0.5	2.5	31.73	8.42	6.6	35.9	.	1245
LC-1	7	13	95	2	1	1	1	2.5	31.05	8.42	6.69	36	.	1245
LC-1	7	13	95	2	1	1	2	2.5	30.14	8.41	6.57	36.2	.	1245
LC-1	7	13	95	2	1	1	3	2.5	30.04	8.39	6.11	36.2	.	1245
LC-1	7	13	95	2	1	1	4	2.5	29.76	8.35	5.34	36.1	.	1245
LC-1	7	13	95	2	1	1	5	2.5	29.58	8.31	4.81	36.1	.	1245
LC-1	7	13	95	2	1	1	6	2.5	29.5	8.29	4.37	36.1	.	1245
LC-1	7	13	95	2	1	1	6.5	2.5	29.5	8.23	3.17	36.2	.	1245
MP-1	7	13	95	2	1	1	0.5	0.7	29.68	7.86	3.17	30.7	.	950
MP-1	7	13	95	2	1	1	1	0.7	29.48	8.25	4.61	34.4	.	950
MP-1	7	13	95	2	1	1	2	0.7	29.32	8.01	1.12	35.5	.	950
MP-1	7	13	95	2	1	1	3.2	0.7	29.15	8.1	1.7	35.9	.	950
MP-2	7	13	95	2	1	1	0.5	0.8	29.98	7.92	1.5	31.4	10	915
MP-2	7	13	95	2	1	1	1	0.8	30	7.97	2.47	33.3	10	915
MP-2	7	13	95	2	1	1	2	0.8	29.27	7.79	0.02	35.9	10	915
MP-2	7	13	95	2	1	1	3	0.8	29.01	7.43	0.03	36	10	915
MP-2	7	13	95	2	1	1	4	0.8	28.89	7.32	0.04	36.1	10	915
PL-1	7	12	95	2	1	1	0.5	0.5	31.3	8.09	2.14	30.8	.	950

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
PL-1	7	12	95	2	1	1	1	0.5	31.28	8.09	2.13	30.8	.	950
PL-1	7	12	95	2	1	1	1.3	0.5	31.26	8.09	2.16	30.8	.	950
PL-2	7	12	95	2	1	1	0.5	0.3	30.38	8.72	5.87	30.4	5	900
PL-2	7	12	95	2	1	1	1	0.3	30.38	8.7	5.91	30.6	5	900
PN-1	7	13	95	2	1	1	0.5	0.5	29.7	7.66	1.95	12.1	.	835
PN-1	7	13	95	2	1	1	1	0.5	29.38	8.06	3.2	34.1	.	835
PN-1	7	13	95	2	1	1	2	0.5	29.09	8.12	3.49	35.6	.	835
SA-1	7	10	95	2	1	1	0.5	1.4	29.19	8.38	6.12	36.4	.	1125
SA-1	7	10	95	2	1	1	2	1.4	29.17	8.38	6	36.4	.	1125
SA-1	7	10	95	2	1	1	4	1.4	28.99	8.37	5.61	36.4	.	1125
SA-1	7	10	95	2	1	1	6	1.4	28.77	8.35	5.08	36.4	.	1125
SA-1	7	10	95	2	1	1	8	1.4	28.77	8.34	5	36.4	.	1125
SA-1	7	10	95	2	1	1	10	1.4	28.77	8.33	4.8	36.4	.	1125
SA-1	7	10	95	2	1	1	12.1	1.4	28.58	8.28	3.6	36.4	.	1125
SC-1	7	11	95	2	1	1	0.5	0.6	30.95	8.18	6.35	16.5	.	1110
SC-1	7	11	95	2	1	1	1	0.6	30.81	8.41	7.31	17.1	.	1110
SC-1	7	11	95	2	1	1	2	0.6	31.46	8.02	2.91	26.1	.	1110
SC-1	7	11	95	2	1	1	3	0.6	30.99	7.93	1.28	27.9	.	1110
SC-1	7	11	95	2	1	1	4	0.6	30.97	7.93	0.05	28.7	.	1110
SC-1	7	11	95	2	1	1	5	0.6	30.79	7.86	0.02	29.1	.	1110
SC-1	7	11	95	2	1	1	6	0.6	30.5	7.58	0.01	29.5	.	1110
SC-1	7	11	95	2	1	1	7	0.6	29.38	7.26	0.01	30.7	.	1110
SC-1	7	11	95	2	1	1	8	0.6	29.09	7.22	0.01	30.8	.	1110
SC-1	7	11	95	2	1	1	9	0.6	28.95	7.21	0.05	30.8	.	1110
SJ-1	7	11	95	2	1	1	0.5	0.6	30.52	8.59	6.88	14.6	.	840

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJ-1	7	11	95	2	1	1	1	0.6	30.38	8.55	6.26	14.8	.	840
SJ-1	7	11	95	2	1	1	1.8	0.6	30.26	8.4	5.42	15	.	840
SJ-2	7	11	95	2	1	1	0.5	0.3	29.74	8.45	7.8	15.2	.	910
SJ-2	7	11	95	2	1	1	1	0.3	29.72	8.44	7.4	15.2	.	910
SJ-3	7	11	95	2	1	1	0.5	1.1	30.26	7.86	4.01	15.8	.	1000
SJ-3	7	11	95	2	1	1	1.4	1.1	30.26	7.82	3.91	15.8	.	1000
SJ-4	7	11	95	2	1	1	0.5	1.5	30.3	8.26	6	15.9	.	945
SJ-4	7	11	95	2	1	1	1	1.5	30.28	8.28	6.05	16	.	945
SJ-4	7	11	95	2	1	1	2	1.5	30.26	8.28	6.18	15.9	.	945
SJ-5	7	11	95	2	1	1	0.5	0.8	30.71	8.11	5.24	16	.	1015
SJ-5	7	11	95	2	1	1	1	0.8	30.67	8.09	5.41	16	.	1015
SJ-5	7	11	95	2	1	1	2	0.8	31.77	7.92	2.65	22.4	.	1015
SJ-5	7	11	95	2	1	1	3	0.8	31.32	7.95	0.34	27.2	.	1015
SJB-1	7	10	95	2	1	1	0.5	1.8	30.48	8.37	5.58	36.4	.	910
SJB-1	7	10	95	2	1	1	2	1.8	29.06	8.39	6.01	36.4	.	910
SJB-1	7	10	95	2	1	1	4	1.8	28.91	8.41	5.84	36.4	.	910
SJB-1	7	10	95	2	1	1	6	1.8	28.75	8.4	5.77	36.5	.	910
SJB-1	7	10	95	2	1	1	8	1.8	28.29	8.41	5.82	36.7	.	910
SJB-1	7	10	95	2	1	1	10	1.8	28.25	8.42	5.78	36.6	.	910
SJB-1	7	10	95	2	1	1	12	1.8	28.21	8.42	5.81	36.7	.	910
SJB-1	7	10	95	2	1	1	14	1.8	28.17	8.42	5.77	36.6	.	910
SJB-1	7	10	95	2	1	1	16.6	1.8	28.17	8.42	5.79	36.5	.	910
SJB-2	7	10	95	2	1	1	0.5	0.6	29.36	8.39	5.62	35.6	.	940
SJB-2	7	10	95	2	1	1	1	0.6	29.32	8.38	5.46	35.6	.	940
SJB-2	7	10	95	2	1	1	1.9	0.6	29.27	8.37	5.28	35.6	.	940

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJB-3	7	10	95	2	1	1	0.5	1.1	29.48	8.39	6.15	36.3	0	1030
SJB-3	7	10	95	2	1	1	2	1.1	29.36	8.39	6.05	36.3	0	1030
SJB-3	7	10	95	2	1	1	4	1.1	28.99	8.38	5.82	36.4	0	1030
SJB-3	7	10	95	2	1	1	6	1.1	28.85	8.38	5.58	36.4	0	1030
SJB-3	7	10	95	2	1	1	8	1.1	28.64	8.38	5.38	36.5	0	1030
SJB-3	7	10	95	2	1	1	10	1.1	28.52	8.38	5.27	36.5	0	1030
SJB-3	7	10	95	2	1	1	11.5	1.1	28.52	8.37	5.34	36.5	0	1030
SJB-4	7	10	95	2	1	1	0.5	0.9	29.84	8.37	5.83	36.2	.	1005
SJB-4	7	10	95	2	1	1	1	0.9	29.82	8.36	5.84	36.2	.	1005
SJB-4	7	10	95	2	1	1	2	0.9	29.7	8.36	5.83	36.2	.	1005
SJB-4	7	10	95	2	1	1	2.8	0.9	29.62	8.35	4.97	36.2	.	1005
SJB-5	7	13	95	2	1	1	0.5	1.2	30.16	8.41	6.19	35.2	.	1015
SJB-5	7	13	95	2	1	1	2	1.2	29.8	8.44	6.15	35.9	.	1015
SJB-5	7	13	95	2	1	1	4	1.2	29.48	8.4	5.46	36	.	1015
SJB-5	7	13	95	2	1	1	6	1.2	29.17	8.39	5.32	36.1	.	1015
SJB-5	7	13	95	2	1	1	8	1.2	28.99	8.39	5.19	36.1	.	1015
SJB-5	7	13	95	2	1	1	10	1.2	28.91	8.39	5.09	36.3	.	1015
SJB-5	7	13	95	2	1	1	11.3	1.2	28.85	8.35	4.53	36.3	.	1015
TL-1	7	10	95	2	1	1	0.5	1.1	29.36	8.33	5.36	33.9	.	730
TL-1	7	10	95	2	1	1	1	1.1	29.27	8.32	5.4	33.9	.	730
TL-1	7	10	95	2	1	1	2	1.1	28.79	8.31	5.28	35.7	.	730
TL-1	7	10	95	2	1	1	3.1	1.1	28.78	8.3	5.26	36	.	730
TL-2	7	12	95	2	1	1	0.5	0.6	30.44	8.37	5.91	33.1	.	1120
TL-2	7	12	95	2	1	1	1.1	0.6	30.26	8.39	6.04	33.6	.	1120
TL-3	7	12	95	2	1	1	0.5	0.8	30.69	8.34	5.64	32.8	.	1100

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Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
TL-3	7	12	95	2	1	1	1	0.8	30.67	8.34	5.64	32.9	.	1100
TL-3	7	12	95	2	1	1	1.2	0.8	30.67	8.34	5.64	32.8	.	1100
TL-4	7	12	95	2	1	1	0.5	0.7	30.99	8.25	4.95	30.8	.	1030
TL-4	7	12	95	2	1	1	1	0.7	31.11	8.23	4.3	32.4	.	1030
TL-4	7	12	95	2	1	1	2	0.7	30.36	8.11	1.42	34.5	.	1030
TL-4	7	12	95	2	1	1	2.8	0.7	30.04	8.2	1.98	34.8	.	1030
TI-5	7	12	95	2	1	1	0.5	0.5	31.57	8.3	4.87	29.4	.	1010
TI-5	7	12	95	2	1	1	1	0.5	31.22	8.19	1.94	31.2	.	1010
TI-5	7	12	95	2	1	1	1.5	0.5	31.32	7.97	0.94	33.6	.	1010
AO-1	7	24	95	3	1	1	0.5	.	28.5	8.49	5.93	36.2	.	845
AO-1	7	24	95	3	1	1	9	.	28.52	8.49	5.88	36.2	.	845
AO-1	7	24	95	3	1	1	18.8	.	28.35	8.47	5.79	36.2	.	845
AO-2	7	24	95	3	1	1	0.5	.	28.35	8.48	5.89	36.2	.	800
AO-2	7	24	95	3	1	1	9	.	28.35	8.48	5.85	36.2	.	800
AO-2	7	24	95	3	1	1	18	.	28.33	8.46	5.84	36.2	.	800
LC-1	7	31	95	3	1	1	0.5	3.5	29.22	8.52	6.21	35.8	.	854
LC-1	7	31	95	3	1	1	1	3.5	29.15	8.53	6.3	35.8	.	854
LC-1	7	31	95	3	1	1	2	3.5	29.11	8.54	6.41	35.8	.	854
LC-1	7	31	95	3	1	1	3	3.5	29.13	8.53	6.37	35.9	.	854
LC-1	7	31	95	3	1	1	4	3.5	29.01	8.51	5.98	35.9	.	854
LC-1	7	31	95	3	1	1	5	3.5	28.94	8.47	5.26	36	.	854
LC-1	7	31	95	3	1	1	6	3.5	28.89	8.48	5.51	36.1	.	854
LC-1	7	31	95	3	1	1	7	3.5	28.91	8.47	5.2	36.1	.	854
LC-1	7	31	95	3	1	1	7.5	3.5	28.87	8.45	5.11	36	.	854
MP-1	7	27	95	3	1	1	0.5	0.2	26.19	7.77	2.6	8.6	.	940

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
MP-1	7	27	95	3	1	1	1	0.2	28.44	7.68	0.05	24	.	940
MP-1	7	27	95	3	1	1	2	0.2	29.46	8.05	0.21	35.3	.	940
MP-1	7	27	95	3	1	1	3	0.2	29.19	8.04	0.47	35.6	.	940
MP-1	7	27	95	3	1	1	3.5	0.2	29.11	8.03	0.75	35.4	.	940
MP-2	7	27	95	3	1	1	0.5	0.2	27.84	7.72	0.12	17.5	6	900
MP-2	7	27	95	3	1	1	1	0.2	30.04	7.93	0.04	32.9	6	900
MP-2	7	27	95	3	1	1	2	0.2	29.42	7.56	0.05	35.5	6	900
MP-2	7	27	95	3	1	1	3	0.2	29.31	7.56	0.06	35.6	6	900
MP-2	7	27	95	3	1	1	3.4	0.2	29.31	7.62	0.12	35.4	6	900
PL-1	7	25	95	3	1	1	0.5	0.2	29.17	8.62	3.4	28.4	.	940
PL-1	7	25	95	3	1	1	1	0.2	29.18	8.61	3.38	28.3	.	940
PL-2	7	25	95	3	1	1	0.5	0.2	29.82	9.18	6.64	29.5	0	845
PL-2	7	25	95	3	1	1	0.9	0.2	29.82	9.14	6.65	29.4	0	845
PN-1	7	27	95	3	1	1	0.5	0.1	25.78	7.96	4.26	0.1	.	840
PN-1	7	27	95	3	1	1	1	0.1	25.78	7.96	4.26	0.1	.	840
PN-1	7	27	95	3	1	1	2	0.1	25.78	8.01	4.26	0.1	.	840
SA-1	7	24	95	3	1	1	0.5	1.2	29.29	8.47	5.72	35.8	.	1150
SA-1	7	24	95	3	1	1	2	1.2	29.25	8.47	5.67	35.8	.	1150
SA-1	7	24	95	3	1	1	4	1.2	29.15	8.47	5.62	35.8	.	1150
SA-1	7	24	95	3	1	1	6	1.2	29.05	8.46	5.44	35.8	.	1150
SA-1	7	24	95	3	1	1	8	1.2	28.91	8.44	4.66	36	.	1150
SA-1	7	24	95	3	1	1	10	1.2	28.75	8.45	4.68	36.6	.	1150
SA-1	7	24	95	3	1	1	11.6	1.2	28.68	8.45	4.71	36.1	.	1150
SC-1	7	26	95	3	1	1	0.5	0.8	30.2	8.42	6.07	17.1	.	1000
SC-1	7	26	95	3	1	1	1	0.8	30.16	8.41	5.95	17.2	.	1000

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SC-1	7	26	95	3	1	1	2	0.8	30.3	8.21	4.17	18.2	.	1000
SC-1	7	26	95	3	1	1	3	0.8	30.85	7.82	0.03	25.1	.	1000
SC-1	7	26	95	3	1	1	4	0.8	30.91	7.91	0.01	26.9	.	1000
SC-1	7	26	95	3	1	1	5	0.8	30.73	7.65	0.02	29.8	.	1000
SC-1	7	26	95	3	1	1	6	0.8	30.5	7.57	0.02	30.1	.	1000
SC-1	7	26	95	3	1	1	7	0.8	29.72	7.35	0.02	30.3	.	1000
SC-1	7	26	95	3	1	1	8	0.8	29.38	7.29	0.03	30.5	.	1000
SC-1	7	26	95	3	1	1	8.3	0.8	29.21	7.28	0.1	30.5	.	1000
SJ-1	7	26	95	3	1	1	0.5	0.6	29.98	8.73	6.53	14.9	.	810
SJ-1	7	26	95	3	1	1	1	0.6	29.94	8.7	6.35	14.9	.	810
SJ-1	7	26	95	3	1	1	1.9	0.6	29.9	8.65	6.01	14.8	.	810
SJ-2	7	26	95	3	1	1	0.5	0.7	29.29	8.28	5.34	15	.	835
SJ-2	7	26	95	3	1	1	1	0.7	29.38	8.11	2.54	15.2	.	835
SJ-2	7	26	95	3	1	1	1.2	0.7	29.38	7.94	2.54	15.2	.	835
SJ-3	7	26	95	3	1	1	0.5	1.8	29.88	8.57	6.17	16.2	.	915
SJ-3	7	26	95	3	1	1	1	1.8	29.88	8.57	6.2	16.2	.	915
SJ-3	7	26	95	3	1	1	1.8	1.8	29.86	8.55	6.34	16.1	.	915
SJ-4	7	26	95	3	1	1	0.5	2	29.86	8.14	4.38	16.2	.	900
SJ-4	7	26	95	3	1	1	1	2	29.86	8.14	4.24	16.2	.	900
SJ-4	7	26	95	3	1	1	2	2	29.9	8.14	4.45	16.2	.	900
SJ-5	7	26	95	3	1	1	0.5	1.2	30.08	8.24	4.65	16.1	.	940
SJ-5	7	26	95	3	1	1	1	1.2	30.08	8.26	4.53	16.2	.	940
SJ-5	7	26	95	3	1	1	2	1.2	30.67	7.96	1.57	19	.	940
SJ-5	7	26	95	3	1	1	3	1.2	30.95	7.7	0.01	26.7	.	940
SJ-5	7	26	95	3	1	1	4	1.2	30.65	7.33	0.02	27.7	.	940

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJ-5	7	26	95	3	1	1	5	1.2	30.34	7.35	0.06	28	.	940
SJB-1	7	24	95	3	1	1	0.5	1.3	29.48	8.58	7.18	35.3	.	915
SJB-1	7	24	95	3	1	1	2	1.3	29.41	8.59	7.18	35.2	.	915
SJB-1	7	24	95	3	1	1	4	1.3	28.99	8.53	6.84	35.8	.	915
SJB-1	7	24	95	3	1	1	6	1.3	28.72	8.5	6.19	36	.	915
SJB-1	7	24	95	3	1	1	8	1.3	28.68	8.51	5.85	36.1	.	915
SJB-1	7	24	95	3	1	1	10	1.3	28.56	8.5	5.85	36.1	.	915
SJB-1	7	24	95	3	1	1	12	1.3	28.5	8.5	5.67	36.2	.	915
SJB-1	7	24	95	3	1	1	14	1.3	28.48	8.5	5.69	36.2	.	915
SJB-1	7	24	95	3	1	1	16	1.3	28.46	8.49	5.67	36.2	.	915
SJB-1	7	24	95	3	1	1	16.5	1.3	28.48	8.49	5.65	36.1	.	915
SJB-2	7	24	95	3	1	1	0.5	0.5	29.56	8.54	5.85	33.7	.	1000
SJB-2	7	24	95	3	1	1	1	0.5	29.54	8.54	5.77	33.7	.	1000
SJB-2	7	24	95	3	1	1	1.9	0.5	29.6	8.53	5.67	33.9	.	1000
SJB-3	7	24	95	3	1	1	0.5	1	29.34	8.56	7.18	35.3	0	1030
SJB-3	7	24	95	3	1	1	2	1	29.32	8.56	6.85	35.3	0	1030
SJB-3	7	24	95	3	1	1	4	1	29.22	8.53	6.55	35.5	0	1030
SJB-3	7	24	95	3	1	1	6	1	28.99	8.48	6.2	35.8	0	1030
SJB-3	7	24	95	3	1	1	8	1	28.77	8.49	5.6	36.1	0	1030
SJB-3	7	24	95	3	1	1	10	1	28.7	8.45	4.85	36.2	0	1030
SJB-3	7	24	95	3	1	1	11	1	28.6	8.45	4.79	36.2	0	1030
SJB-4	7	24	95	3	1	1	0.5	0.4	29.86	8.49	6.13	35.7	.	1100
SJB-4	7	24	95	3	1	1	1	0.4	29.82	8.48	5.97	35.8	.	1100
SJB-4	7	24	95	3	1	1	2	0.4	29.76	8.47	5.87	35.7	.	1100
SJB-4	7	24	95	3	1	1	3	0.4	29.66	8.45	5.44	35.7	.	1100

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJB-5	7	24	95	3	1	1	0.5	0.7	29.7	8.48	5.88	34.9	.	1130
SJB-5	7	24	95	3	1	1	2	0.7	29.21	8.48	5.44	35.8	.	1130
SJB-5	7	24	95	3	1	1	4	0.7	29.05	8.44	4.87	35.9	.	1130
SJB-5	7	24	95	3	1	1	6	0.7	29.03	8.45	5.01	35.9	.	1130
SJB-5	7	24	95	3	1	1	8	0.7	28.95	8.45	4.98	35.9	.	1130
SJB-5	7	24	95	3	1	1	10	0.7	28.81	8.47	5.15	36	.	1130
SJB-5	7	24	95	3	1	1	11.5	0.7	28.7	8.48	5.06	36	.	1130
TL-1	7	24	95	3	1	1	0.5	0.7	28.89	8.46	5.68	28.7	.	735
TL-1	7	24	95	3	1	1	1	0.7	28.92	8.48	5.79	29	.	735
TL-1	7	24	95	3	1	1	2	0.7	28.93	8.44	5.38	30.3	.	735
TL-1	7	24	95	3	1	1	3	0.7	28.66	8.39	5.33	36	.	735
TL-1	7	24	95	3	1	1	3.2	0.7	28.65	8.35	5.55	35.7	.	735
TL-2	7	25	95	3	1	1	0.5	0.4	30.27	8.52	6.68	27.3	.	1110
TL-2	7	25	95	3	1	1	1	0.4	30.34	8.49	6.56	28.1	.	1110
TL-3	7	25	95	3	1	1	0.5	0.3	30.32	8.41	5.79	26.4	.	725
TL-3	7	25	95	3	1	1	1	0.3	30.24	8.41	5.86	26.6	.	725
TL-4	7	25	95	3	1	1	0.5	0.6	30.73	8.43	5.66	29.5	.	1030
TL-4	7	25	95	3	1	1	1	0.6	30.81	8.41	5.23	30.9	.	1030
TL-4	7	25	95	3	1	1	2	0.6	30.42	8.11	1.16	33.8	.	1030
TL-4	7	25	95	3	1	1	2.6	0.6	29.98	8.14	1.21	34.2	.	1030
TL-5	7	25	95	3	1	1	0.5	0.4	31.26	8.81	8.99	22.5	.	1000
TL-5	7	25	95	3	1	1	1	0.4	30.77	8.39	0.8	28.8	.	1000
TL-5	7	25	95	3	1	1	1.3	0.4	30.97	8.1	0.2	31.6	.	1000
AO-1	8	7	95	4	1	1	0.5	18.3	28.44	8.18	5.37	37.9	.	840
AO-1	8	7	95	4	1	1	9	18.3	28.42	8.17	5.36	37.8	.	840

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
AO-1	8	7	95	4	1	1	18.3	18.3	28.36	8.16	5.2	37.9	.	840
AO-2	8	7	95	4	1	1	0.5	15.9	28.25	8.16	5.26	37.8	.	800
AO-2	8	7	95	4	1	1	7.5	15.9	28.25	8.16	5.26	37.8	.	800
AO-2	8	7	95	4	1	1	15.9	15.9	28.19	8.13	5.01	37.9	.	800
LC-1	8	10	95	4	1	1	0.5	1.9	30.16	8.16	5.05	37.2	.	1026
LC-1	8	10	95	4	1	1	1	1.9	30.06	8.16	5.05	37.2	.	1026
LC-1	8	10	95	4	1	1	2	1.9	29.98	8.16	5.02	37.3	.	1026
LC-1	8	10	95	4	1	1	3	1.9	29.68	8.15	4.76	37.3	.	1026
LC-1	8	10	95	4	1	1	4	1.9	29.48	8.11	4.36	37.4	.	1026
LC-1	8	10	95	4	1	1	5	1.9	29.42	8.07	3.99	37.4	.	1026
LC-1	8	10	95	4	1	1	5.7	1.9	29.44	8.07	3.78	37.5	.	1026
MP-1	8	10	95	4	1	1	0.5	0.7	29.31	7.65	1.9	28.1	.	845
MP-1	8	10	95	4	1	1	1	0.7	29.38	7.69	1.82	29.9	.	845
MP-1	8	10	95	4	1	1	2	0.7	29.15	7.82	1.29	36.9	.	845
MP-1	8	10	95	4	1	1	3	0.7	29.11	7.97	2.61	37	.	845
MP-1	8	10	95	4	1	1	3.3	0.7	29.09	7.99	2.82	37.1	.	845
MP-2	8	10	95	4	1	1	0.5	0.7	30.26	7.79	2.68	32.7	12	810
MP-2	8	10	95	4	1	1	1	0.7	29.72	7.65	0.17	35.7	12	810
MP-2	8	10	95	4	1	1	2	0.7	29.15	7.72	0.06	36.7	12	810
MP-2	8	10	95	4	1	1	3	0.7	29.01	6.96	0.08	37	12	810
MP-2	8	10	95	4	1	1	3.8	0.7	29.91	6.97	0.13	37	12	810
PL-1	8	8	95	4	1	1	0.5	0.3	29.88	8.49	3.7	27.6	.	946
PL-1	8	8	95	4	1	1	1.1	0.3	29.86	8.45	3.59	27.6	.	946
PL-2	8	8	95	4	1	1	0.5	0.2	29.8	8.7	4.5	28.1	0	903
PL-2	8	8	95	4	1	1	0.8	0.2	29.8	8.68	4.41	28.1	0	903

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
PN-1	8	10	95	4	1	1	0.5	0.5	29.25	7.45	0.17	4.7	.	905
PN-1	8	10	95	4	1	1	1	0.5	29.23	7.84	0.96	36.5	.	905
PN-1	8	10	95	4	1	1	2.1	0.5	29.17	7.89	1.62	36.8	.	905
SA-1	8	7	95	4	1	1	0.5	2.5	28.85	8.12	5.16	37.4	.	1130
SA-1	8	7	95	4	1	1	2	2.5	28.81	8.12	5.06	37.4	.	1130
SA-1	8	7	95	4	1	1	4	2.5	28.77	8.12	5.03	37.5	.	1130
SA-1	8	7	95	4	1	1	6	2.5	28.73	8.11	4.93	37.5	.	1130
SA-1	8	7	95	4	1	1	8	2.5	28.58	8.11	4.74	37.5	.	1130
SA-1	8	7	95	4	1	1	10	2.5	28.31	8.07	4	37.8	.	1130
SA-1	8	7	95	4	1	1	12	2.5	28.23	8.06	4.04	37.8	.	1130
SC-1	8	9	95	4	1	1	0.5	1.3	30.48	7.68	4.56	14.9	.	940
SC-1	8	9	95	4	1	1	1	1.3	30.46	7.65	4.3	14.9	.	940
SC-1	8	9	95	4	1	1	2	1.3	30.52	7.58	2.32	22.5	.	940
SC-1	8	9	95	4	1	1	3	1.3	30.79	7.65	1.59	26.3	.	940
SC-1	8	9	95	4	1	1	4	1.3	30.79	7.61	1.01	26.9	.	940
SC-1	8	9	95	4	1	1	5	1.3	30.71	7.3	0.02	30.6	.	940
SC-1	8	9	95	4	1	1	6	1.3	30.32	7.11	0.03	30.9	.	940
SC-1	8	9	95	4	1	1	7	1.3	29.98	7.01	0.03	31.1	.	940
SC-1	8	9	95	4	1	1	8	1.3	29.5	6.92	0.04	31.5	.	940
SC-1	8	9	95	4	1	1	8.6	1.3	29.21	6.9	0.09	31.5	.	940
SJ-1	8	9	95	4	1	1	0.5	0.4	30.22	8.39	6.16	12.7	.	800
SJ-1	8	9	95	4	1	1	1	0.4	30.22	8.38	6.15	12.7	.	800
SJ-1	8	9	95	4	1	1	2	0.4	30.2	8.37	6.11	12.7	.	800
SJ-2	8	9	95	4	1	1	0.5	0.7	30.24	7.89	4.18	12.8	.	820
SJ-2	8	9	95	4	1	1	1	0.7	30.46	7.64	2.2	13	.	820

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJ-2	8	9	95	4	1	1	1.3	0.7	30.95	7.13	0.19	13.5	.	820
SJ-3	8	9	95	4	1	1	0.5	1.8	30.61	7.6	3.33	14	.	855
SJ-3	8	9	95	4	1	1	1	1.8	30.59	7.61	3.38	14	.	855
SJ-3	8	9	95	4	1	1	1.8	1.8	30.59	7.61	3.46	14	.	855
SJ-4	8	9	95	4	1	1	0.5	1.1	30.3	7.95	4.77	13.9	.	840
SJ-4	8	9	95	4	1	1	1	1.1	30.3	7.97	4.82	14	.	840
SJ-4	8	9	95	4	1	1	2.1	1.1	30.28	7.96	4.84	13.9	.	840
SJ-5	8	9	95	4	1	1	0.5	0.8	30.59	7.95	4.77	14.1	.	915
SJ-5	8	9	95	4	1	1	1	0.8	30.59	8	4.46	14	.	915
SJ-5	8	9	95	4	1	1	2	0.8	31.03	7.49	1.16	18.8	.	915
SJ-5	8	9	95	4	1	1	2.5	0.8	30.97	7.57	1.45	25	.	915
SJB-1	8	7	95	4	1	1	0.5	1.5	29.4	8.16	5.14	36.9	.	900
SJB-1	8	7	95	4	1	1	2	1.5	29.19	8.15	5.1	37	.	900
SJB-1	8	7	95	4	1	1	4	1.5	28.91	8.17	5.46	37.2	.	900
SJB-1	8	7	95	4	1	1	6	1.5	28.72	8.17	5.27	37.4	.	900
SJB-1	8	7	95	4	1	1	8	1.5	28.5	8.16	5.23	37.6	.	900
SJB-1	8	7	95	4	1	1	10	1.5	28.42	8.16	5.2	37.7	.	900
SJB-1	8	7	95	4	1	1	12	1.5	28.35	8.15	5.12	37.7	.	900
SJB-1	8	7	95	4	1	1	14	1.5	28.35	8.15	5.09	37.7	.	900
SJB-1	8	7	95	4	1	1	15.9	1.5	28.3	8.14	5.12	37.7	.	900
SJB-2	8	7	95	4	1	1	0.5	0.7	29.44	8.18	5.06	32.8	.	930
SJB-2	8	7	95	4	1	1	1	0.7	29.44	8.16	4.95	33.7	.	930
SJB-2	8	7	95	4	1	1	1.5	0.7	29.46	8.11	4.52	35.7	.	930
SJB-3	8	7	95	4	1	1	0.5	1.7	29.11	8.15	5.4	36.9	0	1000
SJB-3	8	7	95	4	1	1	2	1.7	29.07	8.15	5.22	37	0	1000

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Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJB-3	8	7	95	4	1	1	4	1.7	28.79	8.14	5.18	37.4	0	1000
SJB-3	8	7	95	4	1	1	6	1.7	28.68	8.11	4.66	37.5	0	1000
SJB-3	8	7	95	4	1	1	8	1.7	28.56	8.11	4.55	37.6	0	1000
SJB-3	8	7	95	4	1	1	10	1.7	28.39	8.11	4.4	37.7	0	1000
SJB-3	8	7	95	4	1	1	11.3	1.7	28.27	8.08	4.01	37.8	0	1000
SJB-4	8	7	95	4	1	1	0.5	1.3	30.36	8.07	4.64	37.3	.	1035
SJB-4	8	7	95	4	1	1	1	1.3	30.34	8.07	4.6	37.3	.	1035
SJB-4	8	7	95	4	1	1	2	1.3	29.38	8.08	4.59	37.4	.	1035
SJB-4	8	7	95	4	1	1	2.4	1.3	29.27	8.07	4.52	37.4	.	1035
SJB-5	8	7	95	4	1	1	0.5	0.5	28.93	8.08	4.51	36.1	.	1100
SJB-5	8	7	95	4	1	1	2	0.5	28.72	8.11	4.71	37.3	.	1100
SJB-5	8	7	95	4	1	1	4	0.5	28.58	8.11	4.5	37.4	.	1100
SJB-5	8	7	95	4	1	1	6	0.5	28.54	8.09	4.26	37.4	.	1100
SJB-5	8	7	95	4	1	1	8	0.5	28.48	8.08	4.22	37.5	.	1100
SJB-5	8	7	95	4	1	1	10	0.5	28.42	8.08	4.22	37.7	.	1100
SJB-5	8	7	95	4	1	1	10.3	0.5	28.42	8.08	4.23	37.6	.	1100
TL-1	8	7	95	4	1	1	0.5	0.7	29.03	8.05	4.19	34	.	730
TL-1	8	7	95	4	1	1	1	0.7	29.03	8.06	4.2	34.1	.	730
TL-1	8	7	95	4	1	1	2	0.7	29.03	8.05	4.27	34.2	.	730
TL-1	8	7	95	4	1	1	3	0.7	29.01	8.06	4.36	34.6	.	730
TL-1	8	7	95	4	1	1	3.6	0.7	28.77	8.08	4.6	36	.	730
TL-2	8	8	95	4	1	1	0.5	0.6	30.79	8.06	5.41	31.2	.	1146
TL-2	8	8	95	4	1	1	0.8	0.6	30.71	8.06	5.42	31.3	.	1146
TL-3	8	8	95	4	1	1	0.5	0.6	31.2	8.01	4.87	29.8	.	1123
TL-3	8	8	95	4	1	1	1	0.6	31.13	8.01	4.87	29.8	.	1123

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
TL-4	8	8	95	4	1	1	0.5	0.7	30.75	8.12	3.97	28.2	.	1100
TL-4	8	8	95	4	1	1	2	0.7	29.93	8.05	0.1	33.9	.	1100
TL-4	8	8	95	4	1	1	4	0.7	29.52	7.9	0.08	36.1	.	1100
TL-4	8	8	95	4	1	1	6	0.7	27.91	7.81	0.06	36.2	.	1100
TL-4	8	8	95	4	1	1	8	0.7	27.52	7.43	0.05	36.2	.	1100
TL-4	8	8	95	4	1	1	10	0.7	27.15	7.21	0.04	36.3	.	1100
TL-4	8	8	95	4	1	1	12	0.7	27.13	6.88	0.04	36.3	.	1100
TL-5	8	8	95	4	1	1	0.5	0.4	31.3	8.19	3.77	21.4	.	1010
TL-5	8	8	95	4	1	1	1	0.4	30.83	7.96	0.16	29.1	.	1010
TL-5	8	8	95	4	1	1	1.4	0.4	30.54	7.58	0.06	34.1	.	1010
AO-1	8	22	95	5	1	1	0.5	17.5	29.09	8.3	5.03	37	.	835
AO-1	8	22	95	5	1	1	8.5	17.5	29.03	8.3	4.98	37.1	.	835
AO-1	8	22	95	5	1	1	17.5	17.5	28.97	8.29	4.77	37.2	.	835
AO-2	8	22	95	5	1	1	0.5	16.5	28.88	8.28	5.1	37.1	.	750
AO-2	8	22	95	5	1	1	8	16.5	28.91	8.29	5.14	37.2	.	750
AO-2	8	22	95	5	1	1	16.5	16.5	28.79	8.24	4.46	37.2	.	750
LC-1	8	28	95	5	1	1	.	3	.	.	.	.	.	1125
MP-1	8	23	95	5	1	1	0.5	0.4	30.28	7.76	0.03	32.1	.	815
MP-1	8	23	95	5	1	1	1	0.4	30.01	7.8	0.03	35	.	815
MP-1	8	23	95	5	1	1	2	0.4	29.67	7.85	0.03	36.1	.	815
MP-1	8	23	95	5	1	1	3.1	0.4	29.66	7.92	0.06	36.2	.	815
MP-2	8	23	95	5	1	1	0.5	0.4	29.72	7.55	0.05	28.3	12	745
MP-2	8	23	95	5	1	1	1	0.4	30.02	7.66	0.07	35.2	12	745
MP-2	8	23	95	5	1	1	2	0.4	29.9	7.02	0.08	36.1	12	745
MP-2	8	23	95	5	1	1	3	0.4	29.58	7.01	0.1	36.4	12	745

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
MP-2	8	23	95	5	1	1	3.5	0.4	29.46	6.97	0.19	36.5	12	745
PL-1	8	24	95	5	1	1	0.5	0.3	30.06	8.05	0.66	24.8	.	825
PL-1	8	24	95	5	1	1	1	0.3	30.32	8.04	0.2	27.4	.	825
PL-1	8	24	95	5	1	1	1.2	0.3	30.34	8.04	0.18	27.4	.	825
PL-2	8	24	95	5	1	1	0.5	0.2	28.96	8.7	2.86	26	1	750
PL-2	8	24	95	5	1	1	0.7	0.2	28.95	8.7	2.94	26.2	1	750
PN-1	8	23	95	5	1	1	0.5	0.5	28.12	7.6	0.03	3.9	.	830
PN-1	8	23	95	5	1	1	1	0.5	29.72	7.84	0.03	35.2	.	830
PN-1	8	23	95	5	1	1	1.8	0.5	29.68	7.88	0.06	36.2	.	830
SA-1	8	22	95	5	1	1	0.5	2	29.56	8.35	6.08	36.6	.	1200
SA-1	8	22	95	5	1	1	2	2	29.46	8.35	6.09	36.5	.	1200
SA-1	8	22	95	5	1	1	4	2	29.42	8.35	6.03	36.6	.	1200
SA-1	8	22	95	5	1	1	6	2	29.15	8.28	4.95	36.8	.	1200
SA-1	8	22	95	5	1	1	8	2	29.13	8.26	4.84	36.9	.	1200
SA-1	8	22	95	5	1	1	10	2	29.15	8.24	4.38	37	.	1200
SA-1	8	22	95	5	1	1	11.8	2	29.16	8.18	3.57	37.1	.	1200
SC-1	8	21	95	5	1	1	0.5	0.8	29.4	8.1	4.63	15	.	925
SC-1	8	21	95	5	1	1	1	0.8	29.36	8.06	4.36	15.1	.	925
SC-1	8	21	95	5	1	1	2	0.8	30.54	7.62	0.23	22.7	.	925
SC-1	8	21	95	5	1	1	3	0.8	30.91	7.6	0.14	25.5	.	925
SC-1	8	21	95	5	1	1	4	0.8	31.44	7.67	0.02	27.7	.	925
SC-1	8	21	95	5	1	1	5	0.8	31.15	7.73	0.01	29.4	.	925
SC-1	8	21	95	5	1	1	6	0.8	30.3	7.18	0.01	30.9	.	925
SC-1	8	21	95	5	1	1	7	0.8	29.8	7.05	0.01	31.3	.	925
SC-1	8	21	95	5	1	1	8	0.8	29.44	7.01	0.01	31.5	.	925

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SC-1	8	21	95	5	1	1	8.8	0.8	29.25	7	0.02	31.4	.	925
SJ-1	8	21	95	5	1	1	0.5	0.3	28.66	8.57	6.44	13.5	.	741
SJ-1	8	21	95	5	1	1	1	0.3	28.66	8.56	6.45	13.5	.	741
SJ-1	8	21	95	5	1	1	1.8	0.3	29.36	8.44	5.45	13.9	.	741
SJ-2	8	21	95	5	1	1	0.5	0.4	29.61	8.26	4.42	14.2	.	800
SJ-2	8	21	95	5	1	1	1	0.4	29.7	8.18	3.7	14.2	.	800
SJ-3	8	21	95	5	1	1	0.5	0.5	29.29	7.93	2.39	14.8	.	845
SJ-3	8	21	95	5	1	1	1	0.5	29.27	7.88	2.14	14.8	.	845
SJ-3	8	21	95	5	1	1	1.5	0.5	29.31	7.69	0.61	14.9	.	845
SJ-4	8	21	95	5	1	1	0.5	0.5	29.23	8.1	3.44	14.7	.	820
SJ-4	8	21	95	5	1	1	1	0.5	29.23	8.1	3.37	14.7	.	820
SJ-4	8	21	95	5	1	1	1.8	0.5	29.24	8.09	3.4	14.7	.	820
SJ-5	8	21	95	5	1	1	0.5	0.8	29.23	8.41	5.5	14.6	.	900
SJ-5	8	21	95	5	1	1	1	0.8	29.07	8.13	3.66	14.6	.	900
SJ-5	8	21	95	5	1	1	2	0.8	31.01	7.16	0.05	23.8	.	900
SJ-5	8	21	95	5	1	1	2.7	0.8	31.38	7.54	0.12	26	.	900
SJB-1	8	22	95	5	1	1	0.5	2	29.76	8.3	5.05	36.5	.	905
SJB-1	8	22	95	5	1	1	2	2	29.52	8.28	4.86	36.7	.	905
SJB-1	8	22	95	5	1	1	4	2	29.42	8.26	4.62	36.9	.	905
SJB-1	8	22	95	5	1	1	6	2	29.19	8.29	4.83	37.1	.	905
SJB-1	8	22	95	5	1	1	8	2	29.17	8.29	4.84	37.1	.	905
SJB-1	8	22	95	5	1	1	10	2	29.11	8.3	4.87	37.2	.	905
SJB-1	8	22	95	5	1	1	12	2	29.11	8.29	4.86	37.1	.	905
SJB-1	8	22	95	5	1	1	14	2	29.11	8.29	4.86	37.2	.	905
SJB-1	8	22	95	5	1	1	15.6	2	29.09	8.29	4.83	37.1	.	905

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
SJB-2	8	22	95	5	1	1	0.5	1	29.52	8.41	5	31	.	940
SJB-2	8	22	95	5	1	1	1	1	30	8.25	4.21	36.2	.	940
SJB-2	8	22	95	5	1	1	1.5	1	29.96	8.24	4.1	36.3	.	940
SJB-3	8	22	95	5	1	1	0.5	2	29.78	8.35	6.48	35.8	0	1000
SJB-3	8	22	95	5	1	1	2	2	29.56	8.34	5.95	36.5	0	1000
SJB-3	8	22	95	5	1	1	4	2	29.34	8.3	5.04	36.6	0	1000
SJB-3	8	22	95	5	1	1	6	2	29.27	8.29	4.88	36.7	0	1000
SJB-3	8	22	95	5	1	1	8	2	29.29	8.27	4.53	36.7	0	1000
SJB-3	8	22	95	5	1	1	10	2	29.13	8.22	3.72	36.9	0	1000
SJB-3	8	22	95	5	1	1	12	2	28.99	8.13	2.57	37	0	1000
SJB-3	8	22	95	5	1	1	12.8	2	28.95	8.12	2.67	37	0	1000
SJB-4	8	22	95	5	1	1	0.5	1.7	30.71	8.24	4.95	36.7	.	1050
SJB-4	8	22	95	5	1	1	1	1.7	30.65	8.24	4.9	36.7	.	1050
SJB-4	8	22	95	5	1	1	2	1.7	30.71	8.24	4.92	36.7	.	1050
SJB-4	8	22	95	5	1	1	3	1.7	30.28	8.27	5.37	36.7	.	1050
SJB-4	8	22	95	5	1	1	3.3	1.7	29.74	8.25	5.08	36.6	.	1050
SJB-5	8	22	95	5	1	1	0.5	1.5	30.08	8.26	5.16	36.4	.	1120
SJB-5	8	22	95	5	1	1	2	1.5	30.1	8.26	4.93	36.4	.	1120
SJB-5	8	22	95	5	1	1	4	1.5	29.83	8.24	4.61	36.7	.	1120
SJB-5	8	22	95	5	1	1	6	1.5	29.4	8.23	4.1	36.8	.	1120
SJB-5	8	22	95	5	1	1	8	1.5	29.27	8.2	3.7	36.9	.	1120
SJB-5	8	22	95	5	1	1	10	1.5	29.13	8.16	3.21	37	.	1120
SJB-5	8	22	95	5	1	1	10.4	1.5	29.11	8.14	2.97	37	.	1120
TL-1	8	22	95	5	1	1	0.5	0.7	29.19	8.25	4.66	28.9	.	720
TL-1	8	22	95	5	1	1	1	0.7	29.44	8.26	4.74	30.2	.	720

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Time
TL-1	8	22	95	5	1	1	2	0.7	29.18	8.21	4.55	33.5	.	720
TL-1	8	22	95	5	1	1	3	0.7	28.95	8.19	4.58	35.4	.	720
TL-1	8	22	95	5	1	1	3.8	0.7	28.81	8.18	4.82	36.3	.	720
TL-2	8	24	95	5	1	1	0.5	0.4	29.72	8.12	3.87	31.4	.	1000
TL-2	8	24	95	5	1	1	0.7	0.4	29.79	8.11	3.8	31.5	.	1000
TL-3	8	24	95	5	1	1	0.5	0.4	29.34	8.2	4.47	28.7	.	940
TL-3	8	24	95	5	1	1	1	0.4	29.34	8.2	4.46	28.7	.	940
TL-4	8	24	95	5	1	1	0.5	0.6	30.15	8.09	4.05	28.1	.	900
TL-4	8	24	95	5	1	1	2	0.6	29.8	8.01	0.09	34.5	.	900
TL-4	8	24	95	5	1	1	4	0.6	29.05	7.91	0.06	36.2	.	900
TL-4	8	24	95	5	1	1	6	0.6	27.83	7.73	0.05	36.2	.	900
TL-4	8	24	95	5	1	1	8	0.6	27.3	7.4	0.05	36.2	.	900
TL-4	8	24	95	5	1	1	10	0.6	27.1	7.15	0.04	36.3	.	900
TL-4	8	24	95	5	1	1	12.4	0.6	27.15	7.05	0.03	36.3	.	900
TL-5	8	24	95	5	1	1	0.5	0.3	30.24	8.39	0.62	26.8	.	845
TL-5	8	24	95	5	1	1	1	0.3	30.78	7.86	0.03	34	.	845
TL-5	8	24	95	5	1	1	1.3	0.3	30.67	7.7	0.04	34.8	.	845

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Table B2
In Situ Data for Tributary Sampling Stations

Station	Month	Day	Year	Event	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Discharge (m^3/sec)	Time
T-3	8	6	95	2	1	1	0	.	27.75	8.38	5.65	.	.	0.414	1200
T-3	8	6	95	2	1	1	0	.	27.51	8.35	5.55	.	.	0.529	1230
T-3	8	6	95	2	1	1	0.1	.	27.55	8.12	5.91	.	.	4.416	1300
T-3	8	6	95	2	1	1	0.1	.	27.9	7.97	6.17	.	.	4.83	1330
T-3	8	6	95	2	1	1	0.1	.	27.95	7.9	6.05	.	.	4.232	1400
T-3	8	6	95	2	1	1	0.1	.	27.93	7.95	5.84	.	.	3.634	1500
T-3	8	6	95	2	1	1	0.1	.	27.85	7.78	6.13	.	.	2.162	1600
T-3	8	6	95	2	1	1	0.1	.	27.8	8.05	5.95	.	.	1.794	1700
T-3	8	6	95	2	1	1	0	.	27.95	7.92	6.04	.	.	0.483	1800
T-3	8	6	95	2	1	1	0	.	27.91	8.25	6.18	.	.	0.368	1900
T-3	8	6	95	2	1	1	0	.	27.8	8.12	5.97	.	.	0.345	2000
T-4	8	17	95	3	1	1	0.3	.	28.1	8.01	6.31	.	.	.	900
T-4	8	17	95	3	1	1	0.5	.	27.85	8.17	6.54	.	.	.	1500
T-4	8	17	95	3	1	1	0.7	.	27.77	8.34	6.6	.	.	.	2100
T-4	8	18	95	3	1	1	0.6	.	27.91	8.45	6.51	.	.	.	600
T-4	8	18	95	3	1	1	0.7	.	27.9	8.37	6.71	.	.	.	1200
T-4	8	18	95	3	1	1	0.6	.	27.97	8.4	6.48	.	.	.	1700
T-4	8	18	95	3	1	1	0.7	.	27.74	8.29	6.52	.	.	.	2200
T-4	8	18	95	3	1	1	0.6	.	27.7	8.31	6.59	.	.	.	2400
T-4	8	19	95	3	1	1	0.6	.	27.8	8.34	6.47	.	.	.	600
T-4	8	19	95	3	1	1	0.6	.	27.75	8.41	6.53	.	.	.	1000
T-4	8	19	95	3	1	1	0.6	.	27.7	8.51	6.62	.	.	.	1400
T-4	8	19	95	3	1	1	0.6	.	27.67	8.44	6.49	.	.	.	1800
T-4	8	19	95	3	1	1	0.6	.	27.71	8.37	6.52	.	.	.	2200
T-4	8	19	95	3	1	1	0.6	.	27.8	8.47	6.45	.	.	.	2400

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Station	Month	Day	Year	Event	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Discharge (m3/sec)	Time
T-4	8	20	95	3	1	1	0.4	.	27.75	8.29	6.64	.	.	.	600
T-4	8	20	95	3	1	1	0.3	.	27.9	8.25	6.5	.	.	.	1000
T-3	8	17	95	4	1	1	0	.	27.51	8.13	5.69	.	.	0.5106	1600
T-3	8	18	95	4	1	1	0.1	.	27.32	7.94	5.53	.	.	1.8216	800
T-3	8	18	95	4	1	1	0.1	.	27.28	7.91	5.59	.	.	3.2292	1400
T-3	8	18	95	4	1	1	0.1	.	27.3	7.88	5.35	.	.	1.886	2000
T-3	8	18	95	4	1	1	0.1	.	27.15	7.9	5.41	.	.	3.6892	2300
T-3	8	19	95	4	1	1	0.1	.	27.21	7.79	5.32	.	.	1.9596	800
T-3	8	19	95	4	1	1	0.1	.	27.3	7.93	5.54	.	.	3.9652	1200
T-3	8	19	95	4	1	1	0.1	.	27.41	7.75	5.81	.	.	3.3764	1600
T-3	8	19	95	4	1	1	0	.	27.32	7.92	5.49	.	.	0.5566	2000
T-3	8	20	95	4	1	1	0	.	27.33	7.98	5.85	.	.	0.3634	800
T-4	9	1	95	5	1	1	0.3	.	.	.	.	.	.	.	1400
T-4	9	1	95	5	1	1	0.7	.	.	.	.	.	.	.	1430
T-4	9	1	95	5	1	1	1	.	.	.	.	.	.	.	1500
T-4	9	1	95	5	1	1	1	.	.	.	.	.	.	.	1530
T-4	9	1	95	5	1	1	1	.	.	.	.	.	.	.	1600
T-4	9	1	95	5	1	1	0.9	.	.	.	.	.	.	.	1630
T-4	9	1	95	5	1	1	0.8	.	.	.	.	.	.	.	1700
T-4	9	1	95	5	1	1	0.4	.	.	.	.	.	.	.	1800
T-4	9	1	95	5	1	1	0.4	.	.	.	.	.	.	.	1900
T-4	9	1	95	5	1	1	0.4	.	.	.	.	.	.	.	2000
T-4	9	1	95	5	1	1	0.4	.	.	.	.	.	.	.	2100
T-4	9	2	95	5	1	1	0.3	.	.	.	.	.	.	.	600
T1	7	17	95	1	1	1	0.9	bottom	27.52	8.28	4.73	.	.	0.495	.
T2	7	17	95	1	1	1	0.39	0.25	27.84	8.53	6.5	.	.	0.195	.
T3	7	17	95	1	1	1	0.5	bottom	27	8.38	6.39	.	.	0.3772	.

Station	Month	Day	Year	Event	Rep	Split	Depth (m)	Secchi (m)	Temp (C)	pH (STD)	DO (mg/L)	Salinity (ppt)	Sulfide (mg/L)	Discharge (m3/sec)	Time
T4	7	17	95	1	1	1	0.18	bottom	28.21	8.75	6.26	.	.	2.0295	.
T5	7	17	95	1	1	1	0.8	bottom	29.29	8.1	6.37	.	.	0.3072	.
T7	7	17	95	1	1	1	1.72	0.3	31.03	32.6	6.4	.	.	.	.
T8	7	17	95	1	1	1	0.3	bottom	28.29	8.28	4.83	.	.	0.009	.
T6	7	17	95	1	1	1	0.49	bottom	27.9	8.01	2.53	.	.	0.04802	.
T1	7	5	95	1	1	1	0.5	bottom	27.17	7.83	5.82	.	.	0.335	.
T2	7	5	95	1	1	1	0.59	0.1	27.36	8	6.91	.	.	0.7965	.
T3	7	5	95	1	1	1	0.7	bottom	27.96	7.73	5.52	.	.	0.644	.
T4	7	5	95	1	1	1	.	bottom	27.25	8.03	6.73	.	.	.	.
T5	7	5	95	1	1	1	0.7	bottom	29.99	8.05	7.62	.	.	0.4704	.
T6	7	5	95	1	1	1	0.49	0.3	28.42	7.75	0.5	.	.	0.04802	.
T7	7	5	95	1	1	1	1.73	0.35	32.19	7.73	1.01	.	.	0.0099	.

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Table B3
Diel In Situ Data for Laguna San Jose

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_BUOY	8	23	95	1200	30.1	8.1	22851	78.6	5.5	29
SJ_BUOY	8	23	95	1215	30.1	8.1	22862	78.8	5.5	27.8
SJ_BUOY	8	23	95	1230	30.1	8.2	22910	85.7	5.9	28.1
SJ_BUOY	8	23	95	1245	30.1	8.2	22954	88.6	6.1	28.7
SJ_BUOY	8	23	95	1300	30.1	8.2	22976	88.2	6.1	29.2
SJ_BUOY	8	23	95	1315	30.1	8.3	22996	93.9	6.5	29.8
SJ_BUOY	8	23	95	1330	30.1	8.3	22990	96.1	6.7	29
SJ_BUOY	8	23	95	1345	30.2	8.4	23056	105.2	7.3	30.5
SJ_BUOY	8	23	95	1400	30.1	8.3	23097	100.4	7	30.7
SJ_BUOY	8	23	95	1415	30.1	8.3	23096	94.7	6.6	30.9
SJ_BUOY	8	23	95	1430	30.2	8.4	23044	114.2	7.9	30.1
SJ_BUOY	8	23	95	1445	30.2	8.4	23041	111.3	7.7	30.6
SJ_BUOY	8	23	95	1500	30.1	8.4	23013	109.8	7.6	30.1
SJ_BUOY	8	23	95	1515	30.1	8.4	23021	109.7	7.6	31.5
SJ_BUOY	8	23	95	1530	30.1	8.5	23001	121.6	8.4	30.9
SJ_BUOY	8	23	95	1545	30.1	8.5	22969	128	8.9	29.9
SJ_BUOY	8	23	95	1600	30.1	8.5	23011	123	8.5	30.5
SJ_BUOY	8	23	95	1615	30.1	8.5	22968	126.9	8.8	31.4
SJ_BUOY	8	23	95	1630	30.1	8.5	22944	127.7	8.9	31.8
SJ_BUOY	8	23	95	1645	30.1	8.5	22999	127.3	8.8	30.7
SJ_BUOY	8	23	95	1700	30.1	8.5	22968	125.5	8.7	30.6
SJ_BUOY	8	23	95	1715	30.1	8.4	23035	118.2	8.2	30.9
SJ_BUOY	8	23	95	1730	30	8.3	22824	106.8	7.4	36.5

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Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_BUOY	8	23	95	1745	29.9	8.3	22697	108.2	7.5	35.4
SJ_BUOY	8	23	95	1800	29.9	8.4	22668	115.5	8	34.6
SJ_BUOY	8	23	95	1815	30	8.3	22704	105.3	7.3	35.7
SJ_BUOY	8	23	95	1830	30	8.4	22739	105.6	7.3	34.3
SJ_BUOY	8	23	95	1845	30	8.3	22721	100.5	7	34.5
SJ_BUOY	8	23	95	1900	30	8.3	22767	86.2	6	31.8
SJ_BUOY	8	23	95	1915	30	8.3	22698	97.6	6.8	32.7
SJ_BUOY	8	23	95	1930	30	8.3	22711	103.6	7.2	34.4
SJ_BUOY	8	23	95	1945	30	8.4	22702	102.2	7.1	34.5
SJ_BUOY	8	23	95	2000	30	8.4	22667	114	7.9	34.2
SJ_BUOY	8	23	95	2015	29.9	8.4	22643	112.4	7.8	34.1
SJ_BUOY	8	23	95	2030	29.9	8.4	22567	110.4	7.7	34.6
SJ_BUOY	8	23	95	2045	29.8	8.4	22545	109.6	7.6	34.7
SJ_BUOY	8	23	95	2100	29.8	8.4	22534	108	7.5	35
SJ_BUOY	8	23	95	2115	29.8	8.4	22533	107.6	7.5	34.7
SJ_BUOY	8	23	95	2130	29.8	8.4	22545	106.6	7.4	34.5
SJ_BUOY	8	23	95	2145	29.8	8.4	22564	107.1	7.5	34.7
SJ_BUOY	8	23	95	2200	29.8	8.3	22537	105.3	7.4	35.2
SJ_BUOY	8	23	95	2215	29.7	8.3	22549	105	7.3	34.4
SJ_BUOY	8	23	95	2230	29.8	8.3	22551	100.5	7	34.5
SJ_BUOY	8	23	95	2245	29.8	8.3	22618	86.3	6	32.7
SJ_BUOY	8	23	95	2300	29.7	8.3	22589	94.6	6.6	33
SJ_BUOY	8	23	95	2315	29.8	8.2	22641	85.5	6	32.3
SJ_BUOY	8	23	95	2330	29.7	8.2	22595	91.7	6.4	33
SJ_BUOY	8	23	95	2345	29.8	8.2	22606	88.7	6.2	32.6

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Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_BUOY	8	24	95	0	29.7	8.2	22610	91.1	6.4	33.1
SJ_BUOY	8	24	95	15	29.7	8.2	22624	89.5	6.3	33.4
SJ_BUOY	8	24	95	30	29.7	8.2	22613	88.7	6.2	33
SJ_BUOY	8	24	95	45	29.7	8.2	22629	85.4	6	34.3
SJ_BUOY	8	24	95	100	29.7	8.2	22646	81.8	5.7	32.7
SJ_BUOY	8	24	95	115	29.7	8.2	22631	83.2	5.8	32.4
SJ_BUOY	8	24	95	130	29.7	8.2	22616	82.5	5.8	32.2
SJ_BUOY	8	24	95	145	30	7.6	22847	29.8	2.1	26.5
SJ_BUOY	8	24	95	200	29.9	7.7	22723	33.6	2.3	26.8
SJ_BUOY	8	24	95	215	29.8	8	22661	45.2	3.2	29.3
SJ_BUOY	8	24	95	230	29.6	8.1	22617	73.7	5.2	29.8
SJ_BUOY	8	24	95	245	29.6	8.1	22602	74.3	5.2	29.8
SJ_BUOY	8	24	95	300	29.6	8.1	22608	73.1	5.1	30
SJ_BUOY	8	24	95	315	29.6	8.1	22613	67.6	4.7	30.5
SJ_BUOY	8	24	95	330	29.6	8.1	22615	71	5	31.2
SJ_BUOY	8	24	95	345	29.6	8.1	22638	70.8	5	31.4
SJ_BUOY	8	24	95	400	29.5	8.1	22635	73.5	5.2	31.7
SJ_BUOY	8	24	95	415	29.5	8.2	22632	77.5	5.4	32.4
SJ_BUOY	8	24	95	430	29.5	8.2	22643	78.8	5.5	32.9
SJ_BUOY	8	24	95	445	29.5	8.2	22650	78	5.5	32.3
SJ_BUOY	8	24	95	500	29.5	8.2	22661	78.8	5.5	31.6
SJ_BUOY	8	24	95	515	29.5	8.2	22670	76.6	5.4	32
SJ_BUOY	8	24	95	530	29.5	8.2	22700	77.6	5.4	31.9
SJ_BUOY	8	24	95	545	29.5	8.1	22707	73.5	5.2	33.5
SJ_BUOY	8	24	95	600	29.5	8.1	22721	73.6	5.2	33.7

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_BUOY	8	24	95	615	29.5	8.1	22732	74.1	5.2	33.5
SJ_BUOY	8	24	95	630	29.4	8.1	22722	74.7	5.2	33.5
SJ_BUOY	8	24	95	645	29.4	8.1	22728	74.3	5.2	33.6
SJ_BUOY	8	24	95	700	29.4	8.1	22737	70.4	4.9	33.4
SJ_BUOY	8	24	95	715	29.4	8.1	22759	68.9	4.8	33.2
SJ_BUOY	8	24	95	730	29.4	8.1	22759	70.4	4.9	32.4
SJ_BUOY	8	24	95	745	29.4	8.1	22781	69.9	4.9	31
SJ_BUOY	8	24	95	800	29.4	8	22798	65.6	4.6	30.4
SJ_BUOY	8	24	95	815	29.4	8	22807	63.4	4.4	30.6
SJ_BUOY	8	24	95	830	29.5	8.1	22810	72.4	5.1	30.4
SJ_BUOY	8	24	95	845	29.4	8	22824	66.1	4.6	30.2
SJ_BUOY	8	24	95	900	29.4	8.1	22791	71.3	5	30.4
SJ_BUOY	8	24	95	915	29.4	8.1	22744	72.1	5.1	31.3
SJ_BUOY	8	24	95	930	29.5	8.1	22749	75.4	5.3	32.1
SJ_BUOY	8	24	95	945	29.5	8	22712	68.5	4.8	31.9
SJ_BUOY	8	24	95	1000	29.5	8	22714	62.3	4.4	29.9
SJ_BUOY	8	24	95	1015	29.5	8.1	22642	71.5	5	34.3
SJ_BUOY	8	24	95	1030	29.6	8.2	22613	82.3	5.8	36.5
SJ_BUOY	8	24	95	1045	29.7	8.3	22609	86.2	6	34.1
SJ_BUOY	8	24	95	1100	29.7	8.2	22599	86.3	6	34.4
SJ_BUOY	8	24	95	1115	29.7	8.2	22624	86.6	6.1	32.1
SJ_BUOY	8	24	95	1130	29.8	8.1	22584	83.9	5.9	37.7
SJ_BUOY	8	24	95	1145	29.8	8.2	22595	92.4	6.4	35
SJ_BUOY	8	24	95	1200	29.8	8.2	22628	93.4	6.5	34
SJ_BUOY	8	24	95	1215	29.9	8.2	22755	90.5	6.3	30

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_BUOY	8	24	95	1230	29.8	8.2	22764	92	6.4	29.4
SJ_BUOY	8	24	95	1245	29.8	8.1	22716	87.7	6.1	29.4
SJ_BUOY	8	24	95	1300	29.8	8.1	22729	85.5	6	28.3
SJ_BUOY	8	24	95	1315	29.8	8.1	22695	87.7	6.1	29.3
SJ_BUOY	8	24	95	1330	29.9	8.2	22663	92.5	6.4	29.2
SJ_BUOY	8	24	95	1345	29.9	8.2	22652	99.4	6.9	30.6
SJ_BUOY	8	24	95	1400	29.9	8.1	22646	94.2	6.6	34.5
SJ_BUOY	8	24	95	1415	29.9	8.3	22651	108.5	7.6	31
SJ_BUOY	8	24	95	1430	29.9	8.1	22758	89.1	6.2	34.3
SJ_BUOY	8	24	95	1445	29.9	8.2	22725	88.9	6.2	31.3
SJ_BUOY	8	24	95	1500	30.1	8.3	22655	104.1	7.2	35
SJ_BUOY	8	24	95	1515	29.9	8.2	22684	96.3	6.7	33.4
SJ_BUOY	8	24	95	1530	30	8.2	22673	100.5	7	33.5
SJ_BUOY	8	24	95	1545	30	8.3	22719	111.7	7.8	32.1
SJ_BUOY	8	24	95	1600	30.1	8.4	22686	122.3	8.5	33.8
SJ_BUOY	8	24	95	1615	30	8.3	22784	104.6	7.3	31.2
SJ_BUOY	8	24	95	1630	30	8.3	22854	108.2	7.5	27.5
SJ_BUOY	8	24	95	1645	30	8.4	22855	117.5	8.2	27.6
SJ_BUOY	8	24	95	1700	30	8.3	22912	106.8	7.4	27.7
SJ_BUOY	8	24	95	1715	30.1	8.3	22944	106	7.3	27.1
SJ_BUOY	8	24	95	1730	30	8.3	22871	112.4	7.8	28.1
SJ_BUOY	8	24	95	1745	30	8.3	22798	113.3	7.9	28.4
SJ_DOCK	8	23	95	1200	30.3	8.3	23260	80.2	5.5	12.9
SJ_DOCK	8	23	95	1215	30.3	8.4	23158	100.8	7	15.5
SJ_DOCK	8	23	95	1230	30.3	8.5	23153	103.5	7.1	14.9

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_DOCK	8	23	95	1245	30.4	8.4	23280	100	6.9	11.9
SJ_DOCK	8	23	95	1300	30.3	8.4	23345	89.8	6.2	15.5
SJ_DOCK	8	23	95	1315	30.3	8.3	23458	91.4	6.3	5
SJ_DOCK	8	23	95	1330	30.3	8.4	23388	92.7	6.4	10.8
SJ_DOCK	8	23	95	1345	30.3	8.3	23453	90.6	6.2	6.4
SJ_DOCK	8	23	95	1400	30.4	8.4	23367	106.4	7.3	10.1
SJ_DOCK	8	23	95	1415	30.3	8.3	23514	88.3	6.1	3.4
SJ_DOCK	8	23	95	1430	30.4	8.2	23596	80.2	5.5	8.6
SJ_DOCK	8	23	95	1445	30.4	8.2	23549	82.4	5.7	7.6
SJ_DOCK	8	23	95	1500	30.4	8.3	23529	84.9	5.8	6.8
SJ_DOCK	8	23	95	1515	30.4	8.1	23670	72.9	5	15
SJ_DOCK	8	23	95	1530	30.4	8.1	23690	73.8	5.1	17.3
SJ_DOCK	8	23	95	1545	30.4	8.2	23692	81.8	5.6	10.4
SJ_DOCK	8	23	95	1600	30.4	8.2	23716	83.8	5.8	6.8
SJ_DOCK	8	23	95	1615	30.4	8.2	23686	83.9	5.8	9.2
SJ_DOCK	8	23	95	1630	30.5	8.2	23675	85.6	5.9	10.3
SJ_DOCK	8	23	95	1645	30.5	8.2	23696	86.7	6	7.5
SJ_DOCK	8	23	95	1700	30.5	8.2	23699	83.5	5.7	6.3
SJ_DOCK	8	23	95	1715	30.5	8.3	23694	87.9	6	12.2
SJ_DOCK	8	23	95	1730	30.5	8.3	23705	83.9	5.8	8.1
SJ_DOCK	8	23	95	1745	30.5	8.2	23737	76.8	5.3	8.8
SJ_DOCK	8	23	95	1800	30.5	7.9	23743	48.8	3.4	0
SJ_DOCK	8	23	95	1815	30.5	7.9	23743	72.1	5	1.4
SJ_DOCK	8	23	95	1830	30.4	8	23758	56.7	3.9	8.4
SJ_DOCK	8	23	95	1845	30.4	8.2	23764	73.3	5	11.3

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_DOCK	8	23	95	1900	30.4	8.2	23774	67.9	4.7	7.5
SJ_DOCK	8	23	95	1915	30.4	8.1	23772	66.4	4.6	6.2
SJ_DOCK	8	23	95	1930	30.4	7.9	23709	54.9	3.8	4.4
SJ_DOCK	8	23	95	1945	30.4	8.2	23518	78.5	5.4	6.1
SJ_DOCK	8	23	95	2000	30.5	8.2	23463	84.5	5.8	10
SJ_DOCK	8	23	95	2015	30.4	8.2	23427	84.6	5.8	10.5
SJ_DOCK	8	23	95	2030	30.4	8.3	23343	86.9	6	10.2
SJ_DOCK	8	23	95	2045	30.2	8.3	23396	88.8	6.1	8.5
SJ_DOCK	8	23	95	2100	30.3	8.2	23402	84.7	5.8	10.7
SJ_DOCK	8	23	95	2115	30.2	8.2	23408	82.9	5.7	7.1
SJ_DOCK	8	23	95	2130	30.2	8.2	23419	86	5.9	10.2
SJ_DOCK	8	23	95	2145	30.2	8.2	23407	77.8	5.4	3.9
SJ_DOCK	8	23	95	2200	30.2	8	23419	30	2.1	0
SJ_DOCK	8	23	95	2215	30.1	7.6	23361	37.4	2.6	0
SJ_DOCK	8	23	95	2230	30.1	7.8	23257	53.8	3.7	0
SJ_DOCK	8	23	95	2245	30.1	8.1	23198	66.8	4.6	11.6
SJ_DOCK	8	23	95	2300	30	8.1	23096	70.1	4.9	5.7
SJ_DOCK	8	23	95	2315	29.9	8.1	23094	70.7	4.9	5
SJ_DOCK	8	23	95	2330	30.2	8.1	23133	72.4	5	6.1
SJ_DOCK	8	23	95	2345	30.2	8.1	23178	72.8	5	6
SJ_DOCK	8	24	95	0	30.2	8.1	23220	71	4.9	5.8
SJ_DOCK	8	24	95	15	30.3	8.1	23239	69	4.8	6.5
SJ_DOCK	8	24	95	30	30.2	8.1	23300	67.4	4.7	5.7
SJ_DOCK	8	24	95	45	30.1	8	23352	62.8	4.3	9.7
SJ_DOCK	8	24	95	100	29.9	7.9	23218	45.9	3.2	11.6

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_DOCK	8	24	95	115	29.8	7.9	23101	54.2	3.8	10.3
SJ_DOCK	8	24	95	130	29.8	7.9	23007	56.8	4	5.8
SJ_DOCK	8	24	95	145	29.7	8	23028	61.6	4.3	10.8
SJ_DOCK	8	24	95	200	29.6	7.9	22962	44.3	3.1	5.8
SJ_DOCK	8	24	95	215	29.7	8	22978	55.3	3.9	18
SJ_DOCK	8	24	95	230	29.7	8	23038	59.6	4.2	8.1
SJ_DOCK	8	24	95	245	29.9	8	23087	63.6	4.4	6.9
SJ_DOCK	8	24	95	300	29.8	7.9	23100	55.2	3.8	8.2
SJ_DOCK	8	24	95	315	29.9	8	23028	58.5	4.1	7.2
SJ_DOCK	8	24	95	330	29.6	8	23101	59.6	4.2	6.9
SJ_DOCK	8	24	95	345	29.5	8	23053	61.2	4.3	5.3
SJ_DOCK	8	24	95	400	29.6	8	23054	58.9	4.1	6.7
SJ_DOCK	8	24	95	415	29.6	8	23143	53.7	3.8	6.1
SJ_DOCK	8	24	95	430	29.6	7.8	23052	44	3.1	9.5
SJ_DOCK	8	24	95	445	29.6	7.9	22948	49.6	3.5	6.5
SJ_DOCK	8	24	95	500	29.6	8	23005	55.8	3.9	6.7
SJ_DOCK	8	24	95	515	29.5	7.9	22969	37.5	2.6	7.3
SJ_DOCK	8	24	95	530	29.4	7.8	22968	42.8	3	5.6
SJ_DOCK	8	24	95	545	29.4	7.8	22908	43.9	3.1	5.3
SJ_DOCK	8	24	95	600	29.4	7.8	22905	41.6	2.9	10.7
SJ_DOCK	8	24	95	615	29.4	7.8	22935	31.2	2.2	10.9
SJ_DOCK	8	24	95	630	29.3	7.7	22850	30.2	2.1	6.3
SJ_DOCK	8	24	95	645	29.4	7.8	22905	33.7	2.4	8.8
SJ_DOCK	8	24	95	700	29.4	7.8	22869	28.3	2	7.5
SJ_DOCK	8	24	95	715	29.3	7.7	22916	28.8	2	6.7

Station	Month	Day	Year	Time	Temp (C)	PH (STD)	SpCond (Micro Siemens)	DOSAT (%)	DO (mg/L)	Turb (NTU)
SJ_DOCK	8	24	95	730	29.3	7.5	22876	18.6	1.3	0
SJ_DOCK	8	24	95	745	29.3	7.6	22870	27.8	2	0
SJ_DOCK	8	24	95	800	29.3	7.6	22880	39.7	2.8	2.4
SJ_DOCK	8	24	95	815	29.4	8	22923	65.8	4.6	6.3
SJ_DOCK	8	24	95	830	29.4	8	22927	63.8	4.5	6.4
SJ_DOCK	8	24	95	845	29.4	7.8	22887	47.3	3.3	5.7
SJ_DOCK	8	24	95	900	29.4	7.9	22747	61.7	4.3	3.8
SJ_DOCK	8	24	95	915	29.4	8	22756	67	4.7	5.9

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Appendix C
Water Chemistry and Biological Data for Tributary and Open-Water Sampling Stations

Table C1
Nitrogen Concentrations for Tributary Sampling Locations

Station	Month	Day	Year	Time	Type	Event	Rep	Split	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
T-1	7	5	95	.	1	.	1	1	0.54	0.48	0.55	0.36
T-1	7	17	95	.	1	.	1	1	0.2	1.2	0.81	0.53
T-2	7	5	95	.	1	.	1	1	0.41	0.19	0.34	0.29
T-2	7	17	95	.	1	.	1	1	0.1	0.2	0.32	0.27
T-3	7	5	95	.	1	.	1	1	0.2	1.3	1.2	0.87
T-3	7	17	95	.	1	.	1	1	0.52	5.3	2.8	2.5
T-4	7	5	95	.	1	.	1	1	0.23	0.37	0.19	0.29
T-4	7	17	95	.	1	.	1	1	0.59	0.7	0.65	0.49
T-5	7	5	95	.	1	.	1	1	0.24	1.9	1.3	1.1
T-5	7	17	95	.	1	.	1	1	0.08	5.5	2.8	2.7
T-6	7	5	95	.	1	.	1	1	0.01	0.87	1.1	0.68
T-6	7	17	95	.	1	.	1	1	0	2.4	1.3	1.3
T-6	7	17	95	.	1	.	2	1	0	2.5	1.5	1.2
T-7	7	5	95	.	1	.	1	1	0.01	4.2	2.5	1.7
T-7	7	17	95	.	1	.	1	1	0.01	1.3	0.91	0.71
T-8	7	5	95	.	1	.	1	1	0.01	0.06	1.4	0.6
T-8	7	17	95	.	1	.	1	1	0	0.06	0.82	0.79
T-3	8	6	95	1200	2	2	1	1	0.87	2.98	2.7	.
T-3	8	6	95	1230	2	2	1	1	1.2	2.4	3.5	.
T-3	8	6	95	1300	2	2	1	1	0.19	2.57	2.9	.

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Station	Month	Day	Year	Time	Type	Event	Rep	Split	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
T-3	8	6	95	1330	2	2	1	1	0.25	0.32	1.1	.
T-3	8	6	95	1400	2	2	1	1	0.31	0.4	0.7	.
T-3	8	6	95	1400	2	2	1	2	0.28	0.16	0.8	.
T-3	8	6	95	1500	2	2	1	1	0.29	1.8	2.3	.
T-3	8	6	95	1600	2	2	1	1	0.23	1.3	1.4	.
T-3	8	6	95	1700	2	2	1	1	0.27	1.4	1.2	.
T-3	8	6	95	1800	2	2	1	1	0.3	1.3	1.7	.
T-3	8	6	95	1900	2	2	1	1	1.2	1.1	1.6	.
T-3	8	6	95	2000	2	2	1	1	0.71	1.6	1.6	.
T-3	8	17	95	1600	2	4	1	1	1.4	1.6	1.2	.
T-3	8	18	95	800	2	4	1	1	0.45	0.52	0.85	.
T-3	8	18	95	1400	2	4	1	1	0.46	0.58	0.79	.
T-3	8	18	95	2000	2	4	1	1	0.48	0.74	1.4	.
T-3	8	18	95	2300	2	4	1	1	0.45	0.74	0.76	.
T-3	8	19	95	800	2	4	1	1	0.49	0.59	0.73	.
T-3	8	19	95	800	2	4	1	2	0.47	0.62	0.62	.
T-3	8	19	95	1200	2	4	1	1	0.49	0.73	0.75	.
T-3	8	19	95	1600	2	4	1	1	0.5	0.87	0.96	.
T-3	8	19	95	2000	2	4	1	1	0.52	0.78	0.86	.
T-3	8	20	95	800	2	4	1	1	1.4	1.4	1	.
T-4	7	14	95	1500	2	1	1	1	0.4	0.7	0.62	.
T-4	7	14	95	1530	2	1	1	1	0.44	0.11	0.08	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
T-4	7	14	95	1600	2	1	1	1	0.47	0.19	0.14	.
T-4	7	14	95	1630	2	1	1	1	0.46	0.25	0.26	.
T-4	7	14	95	1700	2	1	1	1	0.51	0.45	0.43	.
T-4	7	14	95	1730	2	1	1	1	0.53	0.2	0.14	.
T-4	7	14	95	1800	2	1	1	1	0.56	0.23	0.03	.
T-4	7	14	95	1800	2	1	1	2	0.58	0.25	0.02	.
T-4	8	17	95	900	2	3	1	1	1.3	0.46	0.55	.
T-4	8	17	95	1500	2	3	1	1	0.84	0.24	0.27	.
T-4	8	17	95	2100	2	3	1	1	1.1	0.29	0.47	.
T-4	8	18	95	600	2	3	1	1	1.2	0.25	0.53	.
T-4	8	18	95	1200	2	3	1	1	1.2	0.28	0.38	.
T-4	8	18	95	1700	2	3	1	1	1.2	0.27	0.56	.
T-4	8	18	95	2200	2	3	1	1	1.1	0.3	0.41	.
T-4	8	18	95	2200	2	3	1	2	1.1	0.24	0.46	.
T-4	8	19	95	0	2	3	1	1	1.2	0.21	0.64	.
T-4	8	19	95	600	2	3	1	1	1	0.57	1	.
T-4	8	19	95	1000	2	3	1	1	1	0.49	0.74	.
T-4	8	19	95	1400	2	3	1	1	0.97	0.62	0.49	.
T-4	8	19	95	1800	2	3	1	1	1	0.57	0.77	.
T-4	8	19	95	2200	2	3	1	1	0.96	0.56	0.76	.
T-4	8	20	95	0	2	3	1	1	1	0.54	0.71	.
T-4	8	20	95	600	2	3	1	1	1.2	0.33	0.5	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
T-4	8	20	95	600	2	3	1	2	1.2	0.34	0.43	.
T-4	8	20	95	1000	2	3	1	1	1.2	0.4	0.27	.
T-4	9	1	95	1400	2	5	1	1	0.94	0.69	0.8	.
T-4	9	1	95	1430	2	5	1	1	0.48	0.54	0.7	.
T-4	9	1	95	1430	2	5	1	2	0.5	0.58	0.7	.
T-4	9	1	95	1500	2	5	1	1	0.58	0.55	0.6	.
T-4	9	1	95	1530	2	5	1	1	0.71	0.47	0.6	.
T-4	9	1	95	1600	2	5	1	1	0.57	0.32	0.5	.
T-4	9	1	95	1630	2	5	1	1	0.61	0.23	0.4	.
T-4	9	1	95	1700	2	5	1	1	0.58	0.2	0.3	.
T-4	9	1	95	1800	2	5	1	1	0.54	0.24	0.3	.
T-4	9	1	95	1900	2	5	1	1	0.62	0.22	0.5	.
T-4	9	1	95	2000	2	5	1	1	0.6	0.25	0.3	.
T-4	9	1	95	2100	2	5	1	1	0.59	0.28	0.3	.
T-4	9	2	95	600	2	5	1	1	0.74	0.42	0.4	.

Table C2
Phosphorus Concentrations for Tributary Sampling Stations

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
T-1	7	5	95	.	1	.	1	1	0.185	0.17	0.154	0.112
T-1	7	17	95	.	1	.	1	1	0.315	0.256	0.231	0.223
T-2	7	5	95	.	1	.	1	1	0.665	0.772	0.118	0.08
T-2	7	17	95	.	1	.	1	1	0.14	0.143	0.059	0.028
T-3	7	5	95	.	1	.	1	1	0.535	0.345	0.28	0.227
T-3	7	17	95	.	1	.	1	1	0.595	0.433	0.049	0.374
T-4	7	5	95	.	1	.	1	1	0.258	0.26	0.155	0.17
T-4	7	17	95	.	1	.	1	1	0.193	0.234	0.154	0.139
T-5	7	5	95	.	1	.	1	1	0.325	0.255	0.168	0.188
T-5	7	17	95	.	1	.	1	1	0.527	0.382	0.29	0.331
T-6	7	5	95	.	1	.	1	1	0.298	0.232	0.08	0.192
T-6	7	17	95	.	1	.	1	1	0.539	0.488	0.341	0.317
T-6	7	17	95	.	1	.	2	1	0.539	0.462	0.362	0.323
T-7	7	5	95	.	1	.	1	1	0.74	0.605	0.358	0.298
T-7	7	17	95	.	1	.	1	1	0.496	0.414	0.152	0.328
T-8	7	5	95	.	1	.	1	1	1.49	1.24	0.858	0.66
T-8	7	17	95	.	1	.	1	1	1.94	1.6	1.12	0.314
T-3	8	6	95	1200	2	2	1	1	0.48	.	0.265	.
T-3	8	6	95	1230	2	2	1	1	0.408	.	0.245	.
T-3	8	6	95	1300	2	2	1	1	1.42	.	0.355	.

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Station	Month	Day	Year	Time	Type	Event	Rep	Split	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
T-3	8	6	95	1330	2	2	1	1	0.46	.	0.1	.
T-3	8	6	95	1400	2	2	1	1	0.702	.	0.175	.
T-3	8	6	95	1400	2	2	1	2	0.702	.	0.118	.
T-3	8	6	95	1500	2	2	1	1	0.74	.	0.76	.
T-3	8	6	95	1600	2	2	1	1	0.6	.	0.215	.
T-3	8	6	95	1700	2	2	1	1	0.378	.	0.082	.
T-3	8	6	95	1800	2	2	1	1	0.425	.	0.12	.
T-3	8	6	95	1900	2	2	1	1	0.315	.	0.145	.
T-3	8	6	95	2000	2	2	1	1	0.14	.	0.045	.
T-3	8	17	95	1600	2	4	1	1	0.215	.	0.137	.
T-3	8	18	95	800	2	4	1	1	0.378	.	0.133	.
T-3	8	18	95	1400	2	4	1	1	0.268	.	0.097	.
T-3	8	18	95	2000	2	4	1	1	0.328	.	0.108	.
T-3	8	18	95	2300	2	4	1	1	0.355	.	0.115	.
T-3	8	19	95	800	2	4	1	1	0.32	.	0.144	.
T-3	8	19	95	800	2	4	1	2	0.29	.	0.138	.
T-3	8	19	95	1200	2	4	1	1	0.262	.	0.145	.
T-3	8	19	95	1600	2	4	1	1	0.292	.	0.135	.
T-3	8	19	95	2000	2	4	1	1	0.31	.	0.124	.
T-3	8	20	95	800	2	4	1	1	0.235	.	0.116	.
T-4	7	14	95	1500	2	1	1	1	0.306	.	0.084	.
T-4	7	14	95	1530	2	1	1	1	0.334	.	0.064	.

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Station	Month	Day	Year	Time	Type	Event	Rep	Split	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
T-4	7	14	95	1600	2	1	1	1	0.3	.	0.084	.
T-4	7	14	95	1630	2	1	1	1	0.264	.	0.09	.
T-4	7	14	95	1700	2	1	1	1	0.316	.	0.083	.
T-4	7	14	95	1730	2	1	1	1	0.278	.	0.063	.
T-4	7	14	95	1800	2	1	1	1	0.254	.	0.061	.
T-4	7	14	95	1800	2	1	1	2	0.237	.	0.061	.
T-4	8	17	95	900	2	3	1	1	0.194	.	0.114	.
T-4	8	17	95	1500	2	3	1	1	0.239	.	0.079	.
T-4	8	17	95	2100	2	3	1	1	0.211	.	0.075	.
T-4	8	18	95	600	2	3	1	1	0.21	.	0.104	.
T-4	8	18	95	1200	2	3	1	1	0.22	.	0.09	.
T-4	8	18	95	1700	2	3	1	1	0.208	.	0.147	.
T-4	8	18	95	2200	2	3	1	1	0.187	.	0.107	.
T-4	8	18	95	2200	2	3	1	2	0.196	.	0.099	.
T-4	8	19	95	0	2	3	1	1	0.201	.	0.097	.
T-4	8	19	95	600	2	3	1	1	0.248	.	0.14	.
T-4	8	19	95	1000	2	3	1	1	0.243	.	0.144	.
T-4	8	19	95	1400	2	3	1	1	0.254	.	0.11	.
T-4	8	19	95	1800	2	3	1	1	0.256	.	0.131	.
T-4	8	19	95	2200	2	3	1	1	0.265	.	0.149	.
T-4	8	20	95	0	2	3	1	1	0.278	.	0.114	.
T-4	8	20	95	600	2	3	1	1	0.168	.	0.075	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
T-4	8	20	95	600	2	3	1	2	0.16	.	0.076	.
T-4	8	20	95	1000	2	3	1	1	0.165	.	0.093	.
T-4	9	1	95	1400	2	5	1	1	0.184	.	0.092	.
T-4	9	1	95	1430	2	5	1	1	0.412	.	0.138	.
T-4	9	1	95	1430	2	5	1	2	0.409	.	0.137	.
T-4	9	1	95	1500	2	5	1	1	0.399	.	0.085	.
T-4	9	1	95	1530	2	5	1	1	0.295	.	0.072	.
T-4	9	1	95	1600	2	5	1	1	0.465	.	0.062	.
T-4	9	1	95	1630	2	5	1	1	0.334	.	0.066	.
T-4	9	1	95	1700	2	5	1	1	0.288	.	0.037	.
T-4	9	1	95	1800	2	5	1	1	0.313	.	0.054	.
T-4	9	1	95	1900	2	5	1	1	0.208	.	0.063	.
T-4	9	1	95	2000	2	5	1	1	0.243	.	0.075	.
T-4	9	1	95	2100	2	5	1	1	0.217	.	0.073	.
T-4	9	2	95	600	2	5	1	1	0.107	.	0.056	.

sheet 4 of 4

Table C3
Carbon Concentrations for Tributary Sampling Stations

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
T-1	7	5	95	.	1	.	1	1	19.279	12.802	6.477	34.195	26.207	7.989
T-1	7	17	95	.	1	.	1	1	50.485	36.27	14.215	51.801	37.256	14.545
T-2	7	5	95	.	1	.	1	1	29.876	22.722	7.154	40.116	23.848	16.269
T-2	7	17	95	.	1	.	1	1	38.778	28.604	10.174	41.713	30.655	11.059
T-3	7	5	95	.	1	.	1	1	23.132	12.022	11.11	32.333	18.902	13.431
T-3	7	17	95	.	1	.	1	1	48.807	35.254	13.553	51.253	36.529	14.725
T-4	7	5	95	.	1	.	1	1	19.192	13.908	5.284	25.557	17.432	8.126
T-4	7	17	95	.	1	.	1	1	24.926	19.842	10.167	26.184	20.539	11.289
T-5	7	5	95	.	1	.	1	1	31.749	22.525	9.224	33.957	22.742	11.215
T-5	7	17	95	.	1	.	1	1	47.514	33.582	13.932	49.425	34.856	14.568
T-6	7	5	95	.	1	.	1	1	46.2	31.27	14.93	48.722	31.774	16.948
T-6	7	17	95	.	1	.	1	1	29.62	22.431	14.379	36.528	28.255	16.545
T-6	7	17	95	.	1	.	2	1	28.665	22.053	13.225	29.853	23.327	13.053
T-7	7	5	95	.	1	.	1	1	25.135	19.169	11.932	29.725	19.376	20.697
T-7	7	17	95	.	1	.	1	1	51.789	38.122	13.667	53.222	38.898	14.324
T-8	7	5	95	.	1	.	1	1	45.291	32.139	26.303	49.339	31.399	35.881
T-8	7	17	95	.	1	.	1	1	40.605	26.453	28.303	45.952	29.082	33.74
T-3	8	6	95	1200	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1230	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1300	2	2	1	1	.	.	.	.	.	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
T-3	8	6	95	1330	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1400	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1400	2	2	1	2	.	.	.	.	.	.
T-3	8	6	95	1500	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1600	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1700	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1800	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	1900	2	2	1	1	.	.	.	.	.	.
T-3	8	6	95	2000	2	2	1	1	.	.	.	.	.	.
T-3	8	17	95	1600	2	4	1	1	.	.	.	.	.	.
T-3	8	18	95	800	2	4	1	1	.	.	.	.	.	.
T-3	8	18	95	1400	2	4	1	1	.	.	.	.	.	.
T-3	8	18	95	2000	2	4	1	1	.	.	.	.	.	.
T-3	8	18	95	2300	2	4	1	1	.	.	.	.	.	.
T-3	8	19	95	800	2	4	1	1	.	.	.	.	.	.
T-3	8	19	95	800	2	4	1	2	.	.	.	.	.	.
T-3	8	19	95	1200	2	4	1	1	.	.	.	.	.	.
T-3	8	19	95	1600	2	4	1	1	.	.	.	.	.	.
T-3	8	19	95	2000	2	4	1	1	.	.	.	.	.	.
T-3	8	20	95	800	2	4	1	1	.	.	.	.	.	.
T-4	7	14	95	1500	2	1	1	1	.	.	.	.	.	.
T-4	7	14	95	1530	2	1	1	1	.	.	.	.	.	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
T-4	7	14	95	1600	2	1	1	1	.	.	.	.	.	.
T-4	7	14	95	1630	2	1	1	1	.	.	.	.	.	.
T-4	7	14	95	1700	2	1	1	1	.	.	.	.	.	.
T-4	7	14	95	1730	2	1	1	1	.	.	.	.	.	.
T-4	7	14	95	1800	2	1	1	1	.	.	.	.	.	.
T-4	7	14	95	1800	2	1	1	2	.	.	.	.	.	.
T-4	8	17	95	900	2	3	1	1	.	.	.	.	.	.
T-4	8	17	95	1500	2	3	1	1	.	.	.	.	.	.
T-4	8	17	95	2100	2	3	1	1	.	.	.	.	.	.
T-4	8	18	95	600	2	3	1	1	.	.	.	.	.	.
T-4	8	18	95	1200	2	3	1	1	.	.	.	.	.	.
T-4	8	18	95	1700	2	3	1	1	.	.	.	.	.	.
T-4	8	18	95	2200	2	3	1	1	.	.	.	.	.	.
T-4	8	18	95	2200	2	3	1	2	.	.	.	.	.	.
T-4	8	19	95	0	2	3	1	1	.	.	.	.	.	.
T-4	8	19	95	600	2	3	1	1	.	.	.	.	.	.
T-4	8	19	95	1000	2	3	1	1	.	.	.	.	.	.
T-4	8	19	95	1400	2	3	1	1	.	.	.	.	.	.
T-4	8	19	95	1800	2	3	1	1	.	.	.	.	.	.
T-4	8	19	95	2200	2	3	1	1	.	.	.	.	.	.
T-4	8	20	95	0	2	3	1	1	.	.	.	.	.	.
T-4	8	20	95	600	2	3	1	1	.	.	.	.	.	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
T-4	8	20	95	600	2	3	1	2	.	.	.	.	.	.
T-4	8	20	95	1000	2	3	1	1	.	.	.	.	.	.
T-4	9	1	95	1400	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1430	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1430	2	5	1	2	.	.	.	.	.	.
T-4	9	1	95	1500	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1530	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1600	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1630	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1700	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1800	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	1900	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	2000	2	5	1	1	.	.	.	.	.	.
T-4	9	1	95	2100	2	5	1	1	.	.	.	.	.	.
T-4	9	2	95	600	2	5	1	1	.	.	.	.	.	.

Table C4
Solids and Chlorophyll Concentrations for Tributary Sampling Stations

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
T-1	7	5	95	.	1	.	1	1	24	1	1.34
T-1	7	17	95	.	1	.	1	1	10	2	0.67
T-2	7	5	95	.	1	.	1	1	503	50	13.4
T-2	7	17	95	.	1	.	1	1	36	6	8.68
T-3	7	5	95	.	1	.	1	1	5	0	4.4
T-3	7	17	95	.	1	.	1	1	5	1	1.5
T-4	7	5	95	.	1	.	1	1	90	5	1.8
T-4	7	17	95	.	1	.	1	1	7	0	0.83
T-5	7	5	95	.	1	.	1	1	7	4	10.4
T-5	7	17	95	.	1	.	1	1	4	3	3.67
T-6	7	5	95	.	1	.	1	1	12	2	4.4
T-6	7	17	95	.	1	.	1	1	2	2	0.95
T-6	7	17	95	.	1	.	2	1	6	0	0.5
T-7	7	5	95	.	1	.	1	1	39	8	8
T-7	7	17	95	.	1	.	1	1	73	16	46
T-8	7	5	95	.	1	.	1	1	27	12	126
T-8	7	17	95	.	1	.	1	1	12	7	37.9
T-3	8	6	95	1200	2	2	1	1	29	.	.
T-3	8	6	95	1230	2	2	1	1	22	.	.
T-3	8	6	95	1300	2	2	1	1	113	.	.

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Station	Month	Day	Year	Time	Type	Event	Rep	Split	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
T-3	8	6	95	1330	2	2	1	1	120	.	.
T-3	8	6	95	1400	2	2	1	1	181	.	.
T-3	8	6	95	1400	2	2	1	2	145	.	.
T-3	8	6	95	1500	2	2	1	1	117	.	.
T-3	8	6	95	1600	2	2	1	1	82	.	.
T-3	8	6	95	1700	2	2	1	1	44	.	.
T-3	8	6	95	1800	2	2	1	1	44	.	.
T-3	8	6	95	1900	2	2	1	1	63	.	.
T-3	8	6	95	2000	2	2	1	1	53	.	.
T-3	8	17	95	1600	2	4	1	1	13	.	.
T-3	8	18	95	800	2	4	1	1	59	.	.
T-3	8	18	95	1400	2	4	1	1	59	.	.
T-3	8	18	95	2000	2	4	1	1	57	.	.
T-3	8	18	95	2300	2	4	1	1	60	.	.
T-3	8	19	95	800	2	4	1	1	64	.	.
T-3	8	19	95	800	2	4	1	2	74	.	.
T-3	8	19	95	1200	2	4	1	1	43	.	.
T-3	8	19	95	1600	2	4	1	1	55	.	.
T-3	8	19	95	2000	2	4	1	1	47	.	.
T-3	8	20	95	800	2	4	1	1	21	.	.
T-4	7	14	95	1500	2	1	1	1	340	.	.
T-4	7	14	95	1530	2	1	1	1	700	.	.

Sheet 2 of 4

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
T-4	7	14	95	1600	2	1	1	1	1460	.	.
T-4	7	14	95	1630	2	1	1	1	870	.	.
T-4	7	14	95	1700	2	1	1	1	970	.	.
T-4	7	14	95	1730	2	1	1	1	620	.	.
T-4	7	14	95	1800	2	1	1	1	700	.	.
T-4	7	14	95	1800	2	1	1	2	710	.	.
T-4	8	17	95	900	2	3	1	1	56	.	.
T-4	8	17	95	1500	2	3	1	1	72	.	.
T-4	8	17	95	2100	2	3	1	1	78	.	.
T-4	8	18	95	600	2	3	1	1	79	.	.
T-4	8	18	95	1200	2	3	1	1	61	.	.
T-4	8	18	95	1700	2	3	1	1	98	.	.
T-4	8	18	95	2200	2	3	1	1	99	.	.
T-4	8	18	95	2200	2	3	1	2	95	.	.
T-4	8	19	95	0	2	3	1	1	107	.	.
T-4	8	19	95	600	2	3	1	1	87	.	.
T-4	8	19	95	1000	2	3	1	1	98	.	.
T-4	8	19	95	1400	2	3	1	1	73	.	.
T-4	8	19	95	1800	2	3	1	1	86	.	.
T-4	8	19	95	2200	2	3	1	1	129	.	.
T-4	8	20	95	0	2	3	1	1	114	.	.

Station	Month	Day	Year	Time	Type	Event	Rep	Split	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
T-4	8	20	95	600	2	3	1	1	38	.	.
T-4	8	20	95	600	2	3	1	2	28	.	.
T-4	8	20	95	1000	2	3	1	1	31	.	.
T-4	9	1	95	1400	2	5	1	1	78	.	.
T-4	9	1	95	1430	2	5	1	1	502	.	.
T-4	9	1	95	1430	2	5	1	2	597	.	.
T-4	9	1	95	1500	2	5	1	1	413	.	.
T-4	9	1	95	1530	2	5	1	1	582	.	.
T-4	9	1	95	1600	2	5	1	1	674	.	.
T-4	9	1	95	1630	2	5	1	1	565	.	.
T-4	9	1	95	1700	2	5	1	1	374	.	.
T-4	9	1	95	1800	2	5	1	1	300	.	.
T-4	9	1	95	1900	2	5	1	1	228	.	.
T-4	9	1	95	2000	2	5	1	1	233	.	.
T-4	9	1	95	2100	2	5	1	1	221	.	.
T-4	9	2	95	600	2	5	1	1	76	.	.

Table C5
Nitrogen Concentrations for Open-water Sampling Locations

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
AO-1	6	26	95	1	1	1	0.5	0.01	0	0	0
AO-1	6	26	95	1	1	1	21	0.01	0	0	0
AO-2	6	26	95	1	1	1	0.5	0.01	0	0	0
AO-2	6	26	95	1	1	1	16	0.01	0	0	0
LC-1	6	29	95	1	1	1	0.5	0.01	0	0.04	0.04
LC-1	6	29	95	1	1	2	0.5	.	.	.	.
LC-1	6	29	95	1	1	1	8	0.01	0	0.08	0.01
MP-1	6	27	95	1	1	1	1.5	0.01	0.05	0.21	0.04
MP-2	6	27	95	1	1	1	0.5	0.04	0.64	0.7	0.3
MP-2	6	27	95	1	1	1	3.5	0.01	0.74	0.41	0.27
PL-1	6	28	95	1	1	1	0.5	0	0.01	0.17	0.11
PL-2	6	28	95	1	1	1	0.5	0	0.01	0.41	0.26
PN-1	6	27	95	1	1	1	1.5	0.01	0.22	0.18	0.11
SA-1	6	26	95	1	1	1	0.5	0	0	0.02	0
SA-1	6	26	95	1	1	1	12.5	0	0	0.07	0.01
SC-1	6	28	95	1	1	1	0.5	0	0.1	0.3	0.24
SC-1	6	28	95	1	1	1	8	0	10.6	3.8	3.6
SJ-1	6	28	95	1	1	1	1	0.01	0.04	0.53	0.38
SJ-2	6	28	95	1	1	1	0.5	0.01	0.39	0.55	0.39
SJ-3	6	28	95	1	1	1	1	0.01	0.1	0.32	0.25

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
SJ-4	6	28	95	1	1	1	1	0	0.05	0.34	0.22
SJ-5	6	28	95	1	1	1	0.5	0	0.02	0.42	0.21
SJ-5	6	28	95	1	1	1	6	0.04	9.1	3.3	2.8
SJB-1	6	26	95	1	1	1	0.5	0.01	0	0.03	0
SJB-1	6	26	95	1	1	1	14.5	0.02	0.02	0.06	0
SJB-2	6	26	95	1	1	1	0.5	0	0	0	0.03
SJB-3	6	26	95	1	1	1	0.5	0	0	0	0.02
SJB-3	6	26	95	1	1	1	12	0	0	0	0
SJB-4	6	26	95	1	1	1	0.5	0	0	0.06	0.04
SJB-5	6	26	95	1	1	1	0.5	0.01	0	0.06	0.01
SJB-5	6	26	95	1	1	1	11	0	0	0.1	0.03
TL-1	6	26	95	1	1	1	1.5	0.02	0.02	0.03	0
TL-2	6	29	95	1	1	1	0.5	0	0.01	0.09	.
TL-3	6	29	95	1	1	1	0.5	0.01	0	0.08	0.12
TL-4	6	29	95	1	1	1	0.5	0.01	0.01	0.11	0.08
TL-4	6	29	95	1	1	1	13	0.02	9	1.5	1.4
TL-5	6	28	95	1	1	1	0.5	0.01	0.02	0.41	0.09
AO-1	7	10	95	2	1	1	0.5	0	0.18	0.01	0.01
AO-1	7	10	95	2	1	1	21	0.01	0.07	0	0
AO-2	7	10	95	2	1	1	0.5	0.01	0.02	0	0
AO-2	7	10	95	2	1	1	21	0	0.07	0	0.05
LC-1	7	13	95	2	1	1	0.5	0	0.11	0	0

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
LC-1	7	13	95	2	1	1	6	0	0.13	0	0
MP-1	7	13	95	2	1	1	1.5	0	0.09	0.29	0.16
MP-2	7	13	95	2	1	1	0.5	0.01	0.53	0.48	0.48
MP-2	7	13	95	2	1	1	4	0	1.49	0.67	0.64
PL-1	7	12	95	2	1	1	1	0	0	0.14	0.04
PL-2	7	12	95	2	1	1	0.5	0	0.01	0.24	0.04
PL-2	7	12	95	2	2	1	0.5	0	0.02	0.18	0.04
PN-1	7	13	95	2	1	1	1	0.01	0.17	0.2	0.11
PN-1	7	13	95	2	2	1	1	0	0.18	0.14	0.14
SA-1	7	10	95	2	1	1	0.5	0.01	0.14	0	0
SA-1	7	10	95	2	1	1	12	0	0.17	0.02	0.03
SC-1	7	11	95	2	1	1	0.5	0.04	0.02	0.83	0.24
SC-1	7	11	95	2	1	1	9	0	5.8	3.1	2.5
SJ-1	7	11	95	2	1	1	0.5	0	0.05	0.75	0.09
SJ-2	7	11	95	2	1	1	0.5	0	0.37	0.79	0
SJ-3	7	11	95	2	1	1	0.5	0.01	0.23	0.16	0.09
SJ-4	7	11	95	2	1	1	1	0	0.15	0.32	0.04
SJ-4	7	11	95	2	2	1	1	0	0.13	0.21	0.03
SJ-5	7	11	95	2	1	1	0.5	0.01	0.12	0.38	0.25
SJ-5	7	11	95	2	1	1	3	0	0.13	0.49	0.1
SJB-1	7	10	95	2	1	1	0.5	0	0.04	0.08	0.01
SJB-1	7	10	95	2	1	1	16	0	0.08	0.12	0.14

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
SJB-2	7	10	95	2	1	1	0.5	0	0.11	0.09	0.02
SJB-3	7	10	95	2	1	1	0.5	0	0.04	0.01	0.01
SJB-3	7	10	95	2	1	2	0.5	.	.	.	.
SJB-3	7	10	95	2	2	1	0.5	0	.	0.01	0.01
SJB-3	7	10	95	2	3	1	0.5	.	.	.	.
SJB-3	7	10	95	2	1	1	11	0.01	0.12	0.08	0.02
SJB-3	7	10	95	2	1	2	11	.	.	.	.
SJB-4	7	10	95	2	1	1	1.5	0	0.13	0	0
SJB-5	7	13	95	2	1	1	0.5	0	0.04	0.08	0.01
SJB-5	7	13	95	2	1	1	11	0	0.04	0.18	0.13
TL-1	7	10	95	2	1	1	1.5	0.01	0.04	0.02	0.02
TL-2	7	12	95	2	1	1	0.5	0	0.01	0.12	0.02
TL-3	7	12	95	2	1	1	0.5	0	0.02	0.06	0.06
TL-4	7	12	95	2	1	1	1.5	0	0.01	0.13	.
TL-5	7	12	95	2	1	1	1	0	0.01	0.09	0.08
AO-1	7	24	95	3	1	1	0.5	0	0	0	0
AO-1	7	24	95	3	1	1	18	0	0	0.03	0
AO-2	7	24	95	3	1	1	0.5	0	0	0	0
AO-2	7	24	95	3	1	1	18	0	0	0	0
LC-1	7	31	95	3	1	1	0.5	0	0	0	0
LC-1	7	31	95	3	2	1	0.5	0	0.1	0	0
LC-1	7	31	95	3	1	1	7	0	0	0	0

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
LC-1	7	31	95	3	1	2	7	0	0	0	0
MP-1	7	27	95	3	1	1	0.5	0.05	0.42	0.66	0
MP-1	7	27	95	3	1	1	3	0	0	0.3	0
MP-1	7	27	95	3	1	2	3	0.02	0	0.3	0
MP-2	7	27	95	3	1	1	0.5	0.04	0.54	0.9	0.1
MP-2	7	27	95	3	1	1	3	0	0.56	0.49	0.23
PL-1	7	25	95	3	1	1	0.5	0.01	0.01	0.4	0.14
PL-2	7	25	95	3	1	1	0.5	0	0.02	0.6	0.17
PN-1	7	27	95	3	1	1	1	0.32	0.39	0.48	0.3
SA-1	7	24	95	3	1	1	0.5	0	0	0.04	0
SA-1	7	24	95	3	1	1	11	0.01	0.04	0.13	0.05
SC-1	7	26	95	3	1	1	0.5	0	0.02	0.41	0.31
SC-1	7	26	95	3	1	1	8	0	4.5	2	1.2
SJ-1	7	26	95	3	1	1	1	0	0.03	0.71	0.27
SJ-2	7	26	95	3	1	1	0.5	0.01	0.13	0.61	0.31
SJ-3	7	26	95	3	1	1	1	0.01	0.17	0.4	0.31
SJ-3	7	26	95	3	2	1	1	0.01	0.18	0.39	0.35
SJ-4	7	26	95	3	1	1	1	0	0.28	0.37	0.44
SJ-5	7	26	95	3	1	1	0.5	0.01	0.16	0.5	0.35
SJ-5	7	26	95	3	1	1	5	0.04	7.4	2.8	3.1
SJB-1	7	24	95	3	1	1	0.5	0.01	0	0	0
SJB-1	7	24	95	3	1	1	16	0.01	0.01	0.03	0.02

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
SJB-2	7	24	95	3	1	1	1	0	0	0.09	0.02
SJB-3	7	24	95	3	1	1	0.5	0	0	0.03	0
SJB-3	7	24	95	3	1	1	11	0	0.03	0.03	0.02
SJB-4	7	24	95	3	1	1	1.5	0	0	0.03	0
SJB-4	7	24	95	3	2	1	1.5	0	0.04	0.07	0
SJB-5	7	24	95	3	1	1	0.5	0	0	0.1	0.1
SJB-5	7	24	95	3	1	1	11	0	0.03	0.06	0
TL-1	7	24	95	3	1	1	1.5	0.01	0.01	0.18	0.02
TL-2	7	25	95	3	1	1	0.5	0	0.01	0.21	0.06
TL-3	7	25	95	3	1	1	0.5	0	0.11	0.26	0.05
TL-4	7	25	95	3	1	1	1	0	0.09	0.06	0.03
TL-5	7	25	95	3	1	1	0.5	0	0	0.3	0.06
AO-1	8	7	95	4	1	1	0.5	0	0.04	0.15	0.02
AO-1	8	7	95	4	1	1	18	0	0.03	0	0
AO-2	8	7	95	4	1	1	0.5	0	0.02	0	0
AO-2	8	7	95	4	1	1	15	0	0.04	0	0
LC-1	8	10	95	4	1	1	0.5	0	0	0.01	0
LC-1	8	10	95	4	2	1	0.5	0	0	0	0
LC-1	8	10	95	4	1	1	5	0	0.07	0.02	0
MP-1	8	10	95	4	1	1	0.5	0.03	0.74	0.41	0.31
MP-1	8	10	95	4	1	1	3	0	0.12	0.16	.
MP-2	8	10	95	4	1	1	0.5	0.02	0.58	0.52	0.78

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
MP-2	8	10	95	4	1	1	3	0	1.5	0.77	0.15
PL-1	8	8	95	4	1	1	0.5	0	0.03	0.65	0.71
PL-1	8	8	95	4	1	2	0.5	0	0.04	0.7	0.23
PL-2	8	8	95	4	1	1	0.5	0	0.06	0.64	0.22
PN-1	8	10	95	4	1	1	1	0.01	0.32	0.16	0.1
PN-1	8	10	95	4	1	2	1	0	0.27	0.2	0.12
SA-1	8	7	95	4	1	1	0.5	0	0	0.03	.
SA-1	8	7	95	4	1	1	12	0	0.02	0.02	.
SC-1	8	9	95	4	1	1	0.5	0.01	0.07	0.33	0.27
SC-1	8	9	95	4	1	1	8	0	11	8.2	6
SC-1	8	9	95	4	1	2	8	.	.	.	.
SJ-1	8	9	95	4	1	1	2	0.01	0.03	0.21	0.21
SJ-2	8	9	95	4	1	1	0.5	0.02	0.28	0.76	0.45
SJ-3	8	9	95	4	1	1	1	0.01	0.44	0.46	0.4
SJ-3	8	9	95	4	1	2	1	0.01	0.44	0.4	0.42
SJ-4	8	9	95	4	1	1	1	0.01	0.23	0.42	0.34
SJ-4	8	9	95	4	2	1	1	0.01	0.22	0.41	0.31
SJ-5	8	9	95	4	1	1	1	0	0.11	0.3	0.24
SJB-1	8	7	95	4	1	1	0.5	0	0.05	0	0
SJB-1	8	7	95	4	1	1	15	0	0.05	0	0
SJB-2	8	7	95	4	1	1	1	0	0.01	0.07	0.04
SJB-3	8	7	95	4	1	1	0.5	0	0	0	0.01

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
SJB-3	8	7	95	4	1	1	11	0	0.01	0.04	0.02
SJB-4	8	7	95	4	1	1	1	0	0.02	0.05	0.05
SJB-4	8	7	95	4	1	2	1	0	0.04	0.04	0.04
SJB-5	8	7	95	4	1	1	0.5	0.01	0.16	0.09	0.12
SJB-5	8	7	95	4	1	1	10	0	0.05	0.32	0.27
TL-1	8	7	95	4	1	1	0.5	0.01	0.04	0.06	0.04
TL-1	8	7	95	4	1	1	3.6	0	0.06	0.06	0.1
TL-2	8	8	95	4	1	1	0.5	0	0.03	0.11	0.1
TL-3	8	8	95	4	1	1	0.5	0	0.04	0.12	0.08
TL-4	8	8	95	4	1	1	0.5	0	0.06	0.13	0.48
TL-4	8	8	95	4	1	1	10	0.06	5.9	3	0.6
TL-4	8	8	95	4	2	1	10	0.09	5.4	3.1	0.68
TL-5	8	8	95	4	1	1	0.5	0	0.26	0.81	0.31
AO-1	8	22	95	5	1	1	0.5	0.01	0.08	0.06	0.04
AO-1	8	22	95	5	1	1	17	0	0.29	0.03	0.03
AO-2	8	22	95	5	1	1	0.5	0	0.19	0.08	0.02
AO-2	8	22	95	5	1	1	16	0	0.04	0.08	0.03
LC-1	8	28	95	5	1	1	0.5	0	0.41	0.06	0.06
LC-1	8	28	95	5	1	1	8	0.01	0.6	0.05	0.02
MP-1	8	23	95	5	1	1	1.5	0.01	0.61	0.37	0.34
MP-2	8	23	95	5	1	1	0.5	0	2.1	1.1	0.98
MP-2	8	23	95	5	2	1	0.5	0	2.2	1	0.97

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
MP-2	8	23	95	5	1	1	3	0.07	3.6	1.6	1.7
PL-1	8	24	95	5	1	1	0.5	0.02	0.31	0.39	0.16
PL-1	8	22	95	5	2	1	0.7	0.02	0.2	0.52	0.15
PL-2	8	24	95	5	1	1	0.5	0.01	0.13	0.79	0.15
PN-1	8	23	95	5	1	1	1	0	0.44	0.3	0.21
PN-1	8	23	95	5	1	2	1	0	0.5	0.29	0.21
SA-1	8	22	95	5	1	1	0.5	0.01	0.04	0.05	0.04
SA-1	8	22	95	5	1	1	11	0	0.05	0.06	0.02
SC-1	8	21	95	5	1	1	0.5	0.01	0.18	0.49	0.25
SC-1	8	21	95	5	1	1	8	0.03	11.5	5.6	4.8
SJ-1	8	21	95	5	1	1	0.5	0.01	0.08	0.71	0.28
SJ-1	8	21	95	5	2	1	0.5	0	0.05	0.79	0.23
SJ-2	8	21	95	5	1	1	0.5	0	0.22	0.36	0.3
SJ-3	8	21	95	5	1	1	1	0	0.28	0.64	0.34
SJ-3	8	21	95	5	1	2	1	0	0.3	0.65	0.36
SJ-4	8	21	95	5	1	1	1	0	0.24	0.59	0.32
SJ-5	8	21	95	5	1	1	1	0	0.55	0.78	0.48
SJB-1	8	22	95	5	1	1	0.5	0	0.04	0.05	0.02
SJB-1	8	22	95	5	1	1	15	0	0.4	0.03	0.01
SJB-2	8	22	95	5	1	1	1	0	0.23	0.1	0.01
SJB-3	8	22	95	5	1	1	0.5	0	0.08	0.11	0.02
SJB-3	8	22	95	5	1	1	12	0	0.8	0.11	0.03

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	NO3N (mg/L)	NH3N (mg/L)	TKN (mg/L)	DTKN (mg/L)
SJB-4	8	22	95	5	1	1	1.5	0	0.11	0.42	0.04
SJB-4	8	22	95	5	1	2	1.5	0	0.11	0.3	0.05
SJB-5	8	22	95	5	1	1	0.5	0	0.45	0.06	0.02
SJB-5	8	22	95	5	1	1	10	0	0.2	0.04	0.06
TL-1	8	22	95	5	1	1	0.5	0	0.37	0.11	0.09
TL-1	8	24	95	5	1	1	3	0.01	0.28	0.02	0.01
TL-2	8	24	95	5	1	1	0.5	0.01	0.06	0.13	0.09
TL-3	8	24	95	5	1	1	0.5	0.01	0.04	0.12	0.14
TL-3	8	22	95	5	1	2	0.5	0.01	0.06	0.07	0.14
TL-4	8	24	95	5	1	1	0.5	0.01	0.35	0.07	0
TL-4	8	24	95	5	1	1	12	0.01	7	2.2	2.2
TL-5	8	24	95	5	1	1	1	0.01	0.16	0.12	0.08

Table C6
Phosphorus Concentrations for Open-water Sampling Locations

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
AO-1	6	26	95	1	1	1	0.5	0	0.001	0.002	0
AO-1	6	26	95	1	1	1	21	0	0.001	0.002	0
AO-2	6	26	95	1	1	1	0.5	0.001	0.002	0.002	0
AO-2	6	26	95	1	1	1	16	0.009	0.003	0.005	0.001
LC-1	6	29	95	1	1	1	0.5	0.015	0.008	0.007	0.003
LC-1	6	29	95	1	1	2	0.5	.	.	.	.
LC-1	6	29	95	1	1	1	8	0.036	0.026	0.017	0.025
MP-1	6	27	95	1	1	1	1.5	0.096	0.062	0.028	0.041
MP-2	6	27	95	1	1	1	0.5	0.358	0.345	0.167	.
MP-2	6	27	95	1	1	1	3.5	0.156	0.088	0.107	0.089
PL-1	6	28	95	1	1	1	0.5	0.131	0.051	0.023	0.037
PL-2	6	28	95	1	1	1	0.5	0.172	0.091	0.08	0.038
PN-1	6	27	95	1	1	1	1.5	0.11	0.073	0.046	0.066
SA-1	6	26	95	1	1	1	0.5	0.04	0.016	0.03	0.015
SA-1	6	26	95	1	1	1	12.5	0.069	0.018	0.078	0.036
SC-1	6	28	95	1	1	1	0.5	0.138	0.096	0.1	0.083
SC-1	6	28	95	1	1	1	8	1.44	1.25	1.54	1.48
SJ-1	6	28	95	1	1	1	1	0.186	0.131	0.084	0.086
SJ-2	6	28	95	1	1	1	0.5	0.234	0.23	0.158	0.226
SJ-3	6	28	95	1	1	1	1	0.16	0.124	0.117	0.166

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
SJ-4	6	28	95	1	1	1	1	0.168	0.118	0.079	0.099
SJ-5	6	28	95	1	1	1	0.5	0.164	0.108	0.066	0.074
SJ-5	6	28	95	1	1	1	6	1.33	1.21	1.26	.
SJB-1	6	26	95	1	1	1	0.5	0.007	0.007	0.006	0.004
SJB-1	6	26	95	1	1	1	14.5	0.009	0.006	0.006	0.002
SJB-2	6	26	95	1	1	1	0.5	0.042	0.039	0.011	0.005
SJB-3	6	26	95	1	1	1	0.5	0.048	0.015	0.021	0.012
SJB-3	6	26	95	1	1	1	12	0.031	0.028	0.021	0.011
SJB-4	6	26	95	1	1	1	0.5	0.093	0.01	0.061	0.026
SJB-5	6	26	95	1	1	1	0.5	0.066	0.047	0.044	0.018
SJB-5	6	26	95	1	1	1	11	0.089	0.028	0.07	0.031
TL-1	6	26	95	1	1	1	1.5	0.006	0.005	0.004	0.001
TL-2	6	29	95	1	1	1	0.5	0.052	0.028	0.011	0.016
TL-3	6	29	95	1	1	1	0.5	0.053	0.03	0.026	0.037
TL-4	6	29	95	1	1	1	0.5	0.053	0.068	0.018	0.021
TL-4	6	29	95	1	1	1	13	0.63	0.482	0.558	0.558
TL-5	6	28	95	1	1	1	0.5	0.142	0.093	0.041	0.025
AO-1	7	10	95	2	1	1	0.5	0.026	0.001	0.024	0.002
AO-1	7	10	95	2	1	1	21	0.028	0.002	0.02	0.004
AO-2	7	10	95	2	1	1	0.5	0.021	0	0.014	0
AO-2	7	10	95	2	1	1	21	0.026	0.004	0.018	0.001
LC-1	7	13	95	2	1	1	0.5	0.015	0.008	0.005	0.005

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
LC-1	7	13	95	2	1	1	6	0.02	0.016	0.007	0.009
MP-1	7	13	95	2	1	1	1.5	0.165	0.11	0.078	0.073
MP-2	7	13	95	2	1	1	0.5	0.255	0.195	0.185	0.166
MP-2	7	13	95	2	1	1	4	0.295	0.246	0.217	0.217
PL-1	7	12	95	2	1	1	1	0.133	0.074	0.02	0.006
PL-2	7	12	95	2	1	1	0.5	0.119	0.057	0.019	0.004
PL-2	7	12	95	2	2	1	0.5	0.13	0.053	0.011	0.001
PN-1	7	13	95	2	1	1	1	0.125	0.084	0.06	0.059
PN-1	7	13	95	2	2	1	1	0.102	0.085	0.068	0.066
SA-1	7	10	95	2	1	1	0.5	0.04	0.012	0.027	0.001
SA-1	7	10	95	2	1	1	12	0.048	0.016	0.024	0.008
SC-1	7	11	95	2	1	1	0.5	0.174	0.111	0.092	0.067
SC-1	7	11	95	2	1	1	9	1.32	1.18	1.14	1.06
SJ-1	7	11	95	2	1	1	0.5	0.219	0.13	0.117	0.074
SJ-2	7	11	95	2	1	1	0.5	0.318	0.259	0.064	0.037
SJ-3	7	11	95	2	1	1	0.5	0.201	0.143	0.14	0.108
SJ-4	7	11	95	2	1	1	1	0.17	0.124	0.135	0.108
SJ-4	7	11	95	2	2	1	1	0.176	0.126	0.138	0.108
SJ-5	7	11	95	2	1	1	0.5	0.198	0.113	0.131	0.101
SJ-5	7	11	95	2	1	1	3	0.22	0.136	0.103	0.083
SJB-1	7	10	95	2	1	1	0.5	0.046	0.008	0.027	0.003
SJB-1	7	10	95	2	1	1	16	0.027	0.003	0.028	0.003

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
SJB-2	7	10	95	2	1	1	0.5	0.111	0.037	0.029	0.01
SJB-3	7	10	95	2	1	1	0.5	0.046	0.018	0.016	0.018
SJB-3	7	10	95	2	1	2	0.5	.	.	.	.
SJB-3	7	10	95	2	2	1	0.5	.	0.016	0.016	.
SJB-3	7	10	95	2	3	1	0.5	.	.	.	.
SJB-3	7	10	95	2	1	1	11	0.038	0.016	0.143	0.004
SJB-3	7	10	95	2	1	2	11	.	.	.	.
SJB-4	7	10	95	2	1	1	1.5	0.027	0.012	0.062	0.003
SJB-5	7	13	95	2	1	1	0.5	0.073	0.057	0.012	0.016
SJB-5	7	13	95	2	1	1	11	0.029	0.02	0.014	0.011
TL-1	7	10	95	2	1	1	1.5	0.05	0.016	0.019	0.004
TL-2	7	12	95	2	1	1	0.5	0.056	0.028	0.01	0.002
TL-3	7	12	95	2	1	1	0.5	0.049	0.02	0.009	0.001
TL-4	7	12	95	2	1	1	1.5	0.076	0.064	0.014	0.017
TL-5	7	12	95	2	1	1	1	0.071	0.033	0.027	0.01
AO-1	7	24	95	3	1	1	0.5	0.006	0	0.004	0.007
AO-1	7	24	95	3	1	1	18	0.01	0.002	0.002	0.004
AO-2	7	24	95	3	1	1	0.5	0.004	0	0.002	0.004
AO-2	7	24	95	3	1	1	18	0.002	0	0.002	0.004
LC-1	7	31	95	3	1	1	0.5	0.008	0	0.01	0.002
LC-1	7	31	95	3	2	1	0.5	0.01	0	0.007	0
LC-1	7	31	95	3	1	1	7	0.032	0.01	0.01	0

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
LC-1	7	31	95	3	1	2	7	0.032	0.015	0.008	0.007
MP-1	7	27	95	3	1	1	0.5	0.266	0.306	0.126	0.08
MP-1	7	27	95	3	1	1	3	0.177	0.146	0.03	0.012
MP-1	7	27	95	3	1	2	3	0.181	0.152	0.032	0.013
MP-2	7	27	95	3	1	1	0.5	0.378	0.577	0.186	0.125
MP-2	7	27	95	3	1	1	3	0.165	0.267	0.099	0.088
PL-1	7	25	95	3	1	1	0.5	0.166	0.059	0.017	0.001
PL-2	7	25	95	3	1	1	0.5	0.162	0.072	0.025	0.002
PN-1	7	27	95	3	1	1	1	0.458	0.458	0.173	0.123
SA-1	7	24	95	3	1	1	0.5	0.021	0.007	0.006	0.007
SA-1	7	24	95	3	1	1	11	0.022	0.012	0.012	0.012
SC-1	7	26	95	3	1	1	0.5	0.152	0.111	0.076	0.015
SC-1	7	26	95	3	1	1	8	0.772	0.64	0.415	0.005
SJ-1	7	26	95	3	1	1	1	0.188	0.12	0.039	0.007
SJ-2	7	26	95	3	1	1	0.5	0.184	0.094	0.049	0.022
SJ-3	7	26	95	3	1	1	1	0.129	0.09	0.112	0.081
SJ-3	7	26	95	3	2	1	1	0.13	0.092	0.113	0.073
SJ-4	7	26	95	3	1	1	1	0.165	0.129	0.144	0.116
SJ-5	7	26	95	3	1	1	0.5	0.172	0.116	0.103	0.07
SJ-5	7	26	95	3	1	1	5	0.941	0.805	0.89	0.84
SJB-1	7	24	95	3	1	1	0.5	0.025	0.008	0.002	0.003
SJB-1	7	24	95	3	1	1	16	0.008	0.002	0.003	0.005

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
SJB-2	7	24	95	3	1	1	1	0.063	0.035	0.013	0.009
SJB-3	7	24	95	3	1	1	0.5	0.028	0.012	0.004	0.004
SJB-3	7	24	95	3	1	1	11	0.018	0.018	0.011	0.013
SJB-4	7	24	95	3	1	1	1.5	0.057	0.049	0.008	0.007
SJB-4	7	24	95	3	2	1	1.5	0.062	0.04	0.006	0.006
SJB-5	7	24	95	3	1	1	0.5	0.044	0.021	0.008	0.008
SJB-5	7	24	95	3	1	1	11	0.027	0.017	0.01	0.011
TL-1	7	24	95	3	1	1	1.5	0.054	0.022	0.009	0.005
TL-2	7	25	95	3	1	1	0.5	0.074	0.052	0.023	0.003
TL-3	7	25	95	3	1	1	0.5	0.097	0.041	0.016	0
TL-4	7	25	95	3	1	1	1	0.06	0.02	0.012	0.001
TL-5	7	25	95	3	1	1	0.5	0.168	0.09	0.021	0.002
AO-1	8	7	95	4	1	1	0.5	0.001	0.002	0.009	0.004
AO-1	8	7	95	4	1	1	18	0.002	0	0.01	0.003
AO-2	8	7	95	4	1	1	0.5	0.001	0.001	0.011	0.001
AO-2	8	7	95	4	1	1	15	0	0.001	0.006	0.002
LC-1	8	10	95	4	1	1	0.5	0.01	0.003	0.008	0.002
LC-1	8	10	95	4	2	1	0.5	0.014	0.002	0.007	0.002
LC-1	8	10	95	4	1	1	5	0.019	0.004	0.006	0.005
MP-1	8	10	95	4	1	1	0.5	0.206	0.129	0.142	0.117
MP-1	8	10	95	4	1	1	3	0.111	0.032	0.04	0.03
MP-2	8	10	95	4	1	1	0.5	0.202	0.132	0.126	0.124

Sheet 6 of 10

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
MP-2	8	10	95	4	1	1	3	0.252	0.14	0.16	0.135
PL-1	8	8	95	4	1	1	0.5	0.223	0.102	0.046	0.017
PL-1	8	8	95	4	1	2	0.5	0.219	0.105	0.049	0.018
PL-2	8	8	95	4	1	1	0.5	0.175	0.063	0.047	0.014
PN-1	8	10	95	4	1	1	1	0.151	0.106	0.051	0.031
PN-1	8	10	95	4	1	2	1	0.149	0.098	0.051	0.029
SA-1	8	7	95	4	1	1	0.5	0.017	0.006	0.011	0.008
SA-1	8	7	95	4	1	1	12	0.022	0.013	0.013	0.006
SC-1	8	9	95	4	1	1	0.5	0.078	0.04	0.027	0.005
SC-1	8	9	95	4	1	1	8	2.5	2.19	2.42	2.17
SC-1	8	9	95	4	1	2	8	.	.	.	.
SJ-1	8	9	95	4	1	1	2	0.15	0.101	0.026	0.003
SJ-2	8	9	95	4	1	1	0.5	0.21	0.162	0.097	0.063
SJ-3	8	9	95	4	1	1	1	0.134	0.109	0.119	0.091
SJ-3	8	9	95	4	1	2	1	0.132	0.106	0.121	.
SJ-4	8	9	95	4	1	1	1	0.097	0.064	0.064	0.038
SJ-4	8	9	95	4	2	1	1	0.1	0.061	0.06	0.036
SJ-5	8	9	95	4	1	1	1	0.103	0.095	0.028	0.012
SJB-1	8	7	95	4	1	1	0.5	0.021	0.007	0.014	0.004
SJB-1	8	7	95	4	1	1	15	0.003	0	0.008	0.005
SJB-2	8	7	95	4	1	1	1	0.054	0.04	0.018	0.008
SJB-3	8	7	95	4	1	1	0.5	0.016	0.01	0.015	0.004

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
SJB-3	8	7	95	4	1	1	11	0.03	0.015	0.014	0.012
SJB-4	8	7	95	4	1	1	1	0.024	0.019	0.012	0.005
SJB-4	8	7	95	4	1	2	1	0.022	0.018	0.019	0.003
SJB-5	8	7	95	4	1	1	0.5	0.073	0.063	0.039	0.035
SJB-5	8	7	95	4	1	1	10	0.051	0.017	0.019	0.005
TL-1	8	7	95	4	1	1	0.5	0.036	0.014	0.012	0.004
TL-1	8	7	95	4	1	1	3.6	0.039	0.014	0.012	0.003
TL-2	8	8	95	4	1	1	0.5	0.064	0.03	0.02	0.004
TL-3	8	8	95	4	1	1	0.5	0.067	0.085	0.021	0.013
TL-4	8	8	95	4	1	1	0.5	0.087	0.045	0.052	.
TL-4	8	8	95	4	1	1	10	1.04	0.908	0.888	.
TL-4	8	8	95	4	2	1	10	1.05	0.928	1	.
TL-5	8	8	95	4	1	1	0.5	0.093	0.068	0.03	0.01
AO-1	8	22	95	5	1	1	0.5	0.022	0.004	0.008	0.002
AO-1	8	22	95	5	1	1	17	0.01	0.003	0.01	0.002
AO-2	8	22	95	5	1	1	0.5	0.006	0.002	0.009	0.002
AO-2	8	22	95	5	1	1	16	0.007	0.003	0.008	0.001
LC-1	8	28	95	5	1	1	0.5	0.022	0	0.019	0
LC-1	8	28	95	5	1	1	8	0.059	0.028	0.019	0
MP-1	8	23	95	5	1	1	1.5	0.181	0.119	0.107	0.077
MP-2	8	23	95	5	1	1	0.5	0.488	0.418	0.367	0.333
MP-2	8	23	95	5	2	1	0.5	0.533	0.438	0.352	0.323

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
MP-2	8	23	95	5	1	1	3	0.532	0.455	0.546	0.538
PL-1	8	24	95	5	1	1	0.5	0.194	0.115	0.024	0.008
PL-1	8	22	95	5	2	1	0.7	0.192	0.126	0.017	0.006
PL-2	8	24	95	5	1	1	0.5	0.171	0.085	0.018	0.007
PN-1	8	23	95	5	1	1	1	0.163	0.11	0.082	0.067
PN-1	8	23	95	5	1	2	1	0.167	0.121	0.083	0.068
SA-1	8	22	95	5	1	1	0.5	0.013	0.009	0.011	0.001
SA-1	8	22	95	5	1	1	11	0.014	0.015	0.012	0.004
SC-1	8	21	95	5	1	1	0.5	0.112	0.045	0.028	0.006
SC-1	8	21	95	5	1	1	8	2.09	1.7	1.93	1.81
SJ-1	8	21	95	5	1	1	0.5	0.171	0.064	0.035	0.004
SJ-1	8	21	95	5	2	1	0.5	0.172	0.062	0.026	0.004
SJ-2	8	21	95	5	1	1	0.5	0.203	0.121	0.085	0.048
SJ-3	8	21	95	5	1	1	1	0.227	0.14	0.093	0.059
SJ-3	8	21	95	5	1	2	1	0.24	0.147	0.091	0.058
SJ-4	8	21	95	5	1	1	1	0.186	0.103	0.074	0.043
SJ-5	8	21	95	5	1	1	1	0.179	0.108	0.098	0.057
SJB-1	8	22	95	5	1	1	0.5	0.009	0.005	0.009	0.002
SJB-1	8	22	95	5	1	1	15	0.019	0.01	0.011	0.004
SJB-2	8	22	95	5	1	1	1	0.048	0.032	0.019	0.008
SJB-3	8	22	95	5	1	1	0.5	0.027	0.02	0.015	0.005
SJB-3	8	22	95	5	1	1	12	0.023	0.016	0.014	0.002

Station	Month	Day	Year	Round	Rep	Split	Depth	TP (mg/L)	TIP (mg/L)	TDP (mg/L)	DIP (mg/L)
SJB-4	8	22	95	5	1	1	1.5	0.114	0.06	0.053	0.022
SJB-4	8	22	95	5	1	2	1.5	0.116	0.062	0.055	0.025
SJB-5	8	22	95	5	1	1	0.5	0.039	0.023	0.016	0.006
SJB-5	8	22	95	5	1	1	10	0.029	0.019	0.021	0.011
TL-1	8	22	95	5	1	1	0.5	0.054	0.023	0.06	0.053
TL-1	8	24	95	5	1	1	3	0.024	0.011	0.01	0.002
TL-2	8	24	95	5	1	1	0.5	0.089	0.04	0.025	0.006
TL-3	8	24	95	5	1	1	0.5	0.098	0.052	0.041	0.023
TL-3	8	22	95	5	1	2	0.5	0.103	0.058	0.046	0.023
TL-4	8	24	95	5	1	1	0.5	0.097	0.059	0.017	0.002
TL-4	8	24	95	5	1	1	12	0.818	0.545	0.585	0.608
TL-5	8	24	95	5	1	1	1	0.077	0.048	0.024	0.006

Table C7
Carbon Concentrations for Open-water Sampling Locations

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
AO-1	6	26	95	1	1	1	0.5	25.213	21.754	3.459	.	.	.
AO-1	6	26	95	1	1	1	21	25.551	22.549	3.001	.	.	.
AO-2	6	26	95	1	1	1	0.5	26.281	23.643	2.638	.	.	.
AO-2	6	26	95	1	1	1	16	26.39	23.007	3.383	.	.	.
LC-1	6	29	95	1	1	1	0.5	24.984	23.017	1.967	.	.	.
LC-1	6	29	95	1	1	2	0.5	25.6	23.512	2.089	.	.	.
LC-1	6	29	95	1	1	1	8	25.267	22.888	2.38	.	.	.
MP-1	6	27	95	1	1	1	1.5	21.082	18.789	2.292	.	.	.
MP-2	6	27	95	1	1	1	0.5	33.541	26.737	6.804	.	.	.
MP-2	6	27	95	1	1	1	3.5	32.2	28.378	3.822	.	.	.
PL-1	6	28	95	1	1	1	0.5	31.786	25.116	6.67	.	.	.
PL-2	6	28	95	1	1	1	0.5	33.029	21.117	11.912	.	.	.
PN-1	6	27	95	1	1	1	1.5	28.232	25.145	3.087	.	.	.
SA-1	6	26	95	1	1	1	0.5	26.619	23.057	3.562	.	.	.
SA-1	6	26	95	1	1	1	12.5	30.042	23.246	6.796	.	.	.
SC-1	6	28	95	1	1	1	0.5	19.163	12.28	6.883	.	.	.
SC-1	6	28	95	1	1	1	8	33.394	30.244	6.301	.	.	.
SJ-1	6	28	95	1	1	1	1	21.212	13.63	7.582	.	.	.
SJ-2	6	28	95	1	1	1	0.5	19.327	11.57	7.757	.	.	.
SJ-3	6	28	95	1	1	1	1	20.373	13.08	7.293	.	.	.

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
SJ-4	6	28	95	1	1	1	1	14.051	5.226	8.825	.	.	.
SJ-5	6	28	95	1	1	1	0.5	17.702	8.502	9.2	.	.	.
SJ-5	6	28	95	1	1	1	6	27.581	24.381	6.402	.	.	.
SJB-1	6	26	95	1	1	1	0.5	23.12	20.142	2.978	.	.	.
SJB-1	6	26	95	1	1	1	14.5	25.213	22.639	2.574	.	.	.
SJB-2	6	26	95	1	1	1	0.5	27.273	23.514	3.759	.	.	.
SJB-3	6	26	95	1	1	1	0.5	25.998	22.679	3.319	.	.	.
SJB-3	6	26	95	1	1	1	12	26.641	23.275	3.365	.	.	.
SJB-4	6	26	95	1	1	1	0.5	29.671	24.439	5.232	.	.	.
SJB-5	6	26	95	1	1	1	0.5	25.845	22.022	3.823	.	.	.
SJB-5	6	26	95	1	1	1	11	28.548	22.987	5.561	.	.	.
TL-1	6	26	95	1	1	1	1.5	27.36	23.156	4.204	.	.	.
TL-2	6	29	95	1	1	1	0.5	24.711	21.018	3.694	.	.	.
TL-3	6	29	95	1	1	1	0.5	25.834	22.301	3.534	.	.	.
TL-4	6	29	95	1	1	1	0.5	32.898	24.748	8.15	.	.	.
TL-4	6	29	95	1	1	1	13	46.458	39.857	6.601	.	.	.
TL-5	6	28	95	1	1	1	0.5	28.156	22.917	5.239	.	.	.
AO-1	7	10	95	2	1	1	0.5	23.416	22.761	0.655	25.374	24.347	1.027
AO-1	7	10	95	2	1	1	21	21.852	20.72	1.132	25.064	24.059	1.005
AO-2	7	10	95	2	1	1	0.5	23.595	22.928	0.668	25.971	23.97	2.001
AO-2	7	10	95	2	1	1	21	24.3	22.983	1.317	25.04	24.292	0.748
LC-1	7	13	95	2	1	1	0.5	22.785	20.175	2.611	28.071	24.363	3.708

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
LC-1	7	13	95	2	1	1	6	24.589	21.744	2.845	28.78	24.688	4.092
MP-1	7	13	95	2	1	1	1.5	26.678	22.945	3.733	33.295	25.435	7.86
MP-2	7	13	95	2	1	1	0.5	32.163	26.073	6.09	36.094	28.433	7.661
MP-2	7	13	95	2	1	1	4	31.641	26.322	5.319	39.812	31.312	8.5
PL-1	7	12	95	2	1	1	1	30.31	23.627	6.683	32.002	25.034	6.967
PL-2	7	12	95	2	1	1	0.5	27.586	19.222	8.364	40.26	22.393	17.867
PL-2	7	12	95	2	2	1	0.5	28.681	19.969	8.712	38.88	22.134	16.746
PN-1	7	13	95	2	1	1	1	28.469	24.439	4.03	30.198	25.457	4.742
PN-1	7	13	95	2	2	1	1	26.355	22.848	3.507	29.253	25.078	4.175
SA-1	7	10	95	2	1	1	0.5	24.598	23.46	1.138	25.697	24.758	0.939
SA-1	7	10	95	2	1	1	12	23.118	22.495	0.623	25.542	24.536	1.006
SC-1	7	11	95	2	1	1	0.5	24.192	17.337	6.855	23.261	16.239	7.022
SC-1	7	11	95	2	1	1	9	59.036	50.88	8.156	59.752	52.788	6.964
SJ-1	7	11	95	2	1	1	0.5	23.416	15.008	8.408	25.613	16.461	9.152
SJ-2	7	11	95	2	1	1	0.5	25.04	17.626	7.414	27.034	18.635	8.399
SJ-3	7	11	95	2	1	1	0.5	22.759	15.684	7.075	23.01	16.25	6.76
SJ-4	7	11	95	2	1	1	1	22.174	15.03	7.144	22.007	14.054	7.953
SJ-4	7	11	95	2	2	1	1	22.401	15.008	7.393	22.126	15.551	6.575
SJ-5	7	11	95	2	1	1	0.5	22.079	15.363	6.716	23.141	16.039	7.102
SJ-5	7	11	95	2	1	1	3	25.303	17.858	7.444	26.557	22.04	4.516
SJB-1	7	10	95	2	1	1	0.5	25.351	23.804	1.547	25.458	24.414	1.044
SJB-1	7	10	95	2	1	1	16	23.177	21.852	1.326	25.088	24.148	0.94

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
SJB-2	7	10	95	2	1	1	0.5	25.124	23.238	1.885	28.383	24.614	3.77
SJB-3	7	10	95	2	1	1	0.5	.	.	.	28.312	25.401	2.911
SJB-3	7	10	95	2	1	2	0.5	.	.	.	25.518	23.715	1.802
SJB-3	7	10	95	2	2	1	0.5	24.586	23.249	1.337	25.912	24.78	1.132
SJB-3	7	10	95	2	3	1	0.5	.	.	.	25.291	24.214	1.076
SJB-3	7	10	95	2	1	1	11	22.103	22.695	-0.592	25.53	24.447	1.082
SJB-3	7	10	95	2	1	2	11	24.419	23.338	1.081	25.028	24.004	1.025
SJB-4	7	10	95	2	1	1	1.5	24.992	24.536	0.456	25.506	24.359	1.147
SJB-5	7	13	95	2	1	1	0.5	25.472	22.285	3.187	28.096	24.266	3.83
SJB-5	7	13	95	2	1	1	11	26.504	23.173	3.331	27.201	23.746	3.454
TL-1	7	10	95	2	1	1	1.5	25.888	23.671	2.217	26.533	24.181	2.352
TL-2	7	12	95	2	1	1	0.5	26.218	22.264	3.955	28.444	23.292	5.153
TL-3	7	12	95	2	1	1	0.5	27.524	22.794	4.73	28.668	23.281	5.387
TL-4	7	12	95	2	1	1	1.5	28.93	23.93	4.999	32.735	25.034	7.701
TL-5	7	12	95	2	1	1	1	29.626	24.179	5.447	36.827	26.171	10.656
AO-1	7	24	95	3	1	1	0.5	25.538	22.253	3.285	27.115	24.041	3.074
AO-1	7	24	95	3	1	1	18	26.513	23.34	3.173	26.99	22.981	4.01
AO-2	7	24	95	3	1	1	0.5	26.129	23.128	3.001	27.167	23.524	3.642
AO-2	7	24	95	3	1	1	18	27.572	22.52	5.051	26.617	23.718	2.899
LC-1	7	31	95	3	1	1	0.5	26.237	22.724	3.513	27.435	23.306	4.129
LC-1	7	31	95	3	2	1	0.5	26.136	23	3.136	27.177	23.7	3.477
LC-1	7	31	95	3	1	1	7	26.192	23.03	3.162	28.576	24.164	4.413

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
LC-1	7	31	95	3	1	2	7	.	.	.	.	.	.
MP-1	7	27	95	3	1	1	0.5	23.81	16.137	7.673	25.62	15.134	10.486
MP-1	7	27	95	3	1	1	3	31.09	26.062	5.028	37.7	27.531	10.169
MP-1	7	27	95	3	1	2	3	.	.	.	.	.	.
MP-2	7	27	95	3	1	1	0.5	26.32	18.688	7.632	31.4	19.674	11.726
MP-2	7	27	95	3	1	1	3	33.8	28.578	5.222	38.39	30.452	7.938
PL-1	7	25	95	3	1	1	0.5	33.228	21.809	11.42	41.776	22.959	18.817
PL-2	7	25	95	3	1	1	0.5	27.319	15.878	11.441	48.002	19.023	28.979
PN-1	7	27	95	3	1	1	1	17.55	10.321	7.229	18.35	10.303	8.047
SA-1	7	24	95	3	1	1	0.5	27.239	23.534	3.706	27.769	24.004	3.765
SA-1	7	24	95	3	1	1	11	27.239	24.05	3.19	27.706	24.547	3.159
SC-1	7	26	95	3	1	1	0.5	24.53	15.132	9.398	25.599	15.231	10.367
SC-1	7	26	95	3	1	1	8	38.98	30.761	8.219	35.697	23.864	25.195
SJ-1	7	26	95	3	1	1	1	24.337	13.845	10.492	27.014	14.625	12.389
SJ-2	7	26	95	3	1	1	0.5	24.309	14.816	9.492	27.091	15.206	11.885
SJ-3	7	26	95	3	1	1	1	23.567	14.011	9.556	24.058	14.368	9.69
SJ-3	7	26	95	3	2	1	1	23.798	13.87	9.928	24.029	14.268	9.761
SJ-4	7	26	95	3	1	1	1	24.087	14.451	9.636	24.78	15.082	9.699
SJ-5	7	26	95	3	1	1	0.5	23.163	14.368	8.795	24.655	14.733	9.922
SJ-5	7	26	95	3	1	1	5	46.239	36.679	9.56	31.596	23.1	16.993
SJB-1	7	24	95	3	1	1	0.5	26.046	22.852	3.194	26.316	23.257	3.059
SJB-1	7	24	95	3	1	1	16	26.015	22.944	3.071	26.897	23.626	3.271

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
SJB-2	7	24	95	3	1	1	1	29.803	24.455	5.347	29.657	24.446	5.211
SJB-3	7	24	95	3	1	1	0.5	25.89	22.161	3.73	27.239	23.377	3.862
SJB-3	7	24	95	3	1	1	11	27.489	23.663	3.826	28.36	24.4	3.96
SJB-4	7	24	95	3	1	1	1.5	27.883	23.764	4.119	28.806	23.976	4.83
SJB-4	7	24	95	3	2	1	1.5	26.337	23.156	3.181	28.09	24.206	3.884
SJB-5	7	24	95	3	1	1	0.5	27.665	23.838	3.827	28.505	24.216	4.29
SJB-5	7	24	95	3	1	1	11	27.188	23.69	3.497	27.769	24.455	3.314
TL-1	7	24	95	3	1	1	1.5	27.312	21.746	5.566	32.086	22.059	10.026
TL-2	7	25	95	3	1	1	0.5	27.247	20.748	6.499	30.437	21.656	8.781
TL-3	7	25	95	3	1	1	0.5	27.759	21	6.759	30.519	21.728	8.791
TL-4	7	25	95	3	1	1	1	29.374	24.163	5.211	31.858	25.142	6.716
TL-5	7	25	95	3	1	1	0.5	31.777	22.15	9.627	40.539	24.253	16.286
AO-1	8	7	95	4	1	1	0.5	28.274	20.441	7.833	30.419	20.898	9.522
AO-1	8	7	95	4	1	1	18	29.024	20.382	8.642	31.492	20.915	10.578
AO-2	8	7	95	4	1	1	0.5	28.112	19.19	8.922	30.039	20.999	9.04
AO-2	8	7	95	4	1	1	15	28.193	19.714	8.479	30.835	20.788	10.047
LC-1	8	10	95	4	1	1	0.5	28.368	20	8.368	29.639	20.486	9.154
LC-1	8	10	95	4	2	1	0.5	29.286	19.883	9.403	28.591	20.042	8.55
LC-1	8	10	95	4	1	1	5	26.79	18.903	7.886	28.815	20.075	8.74
MP-1	8	10	95	4	1	1	0.5	36.834	23.332	13.502	40.143	24.63	15.514
MP-1	8	10	95	4	1	1	3	48.28	32.03	16.25	32.077	21.482	10.595
MP-2	8	10	95	4	1	1	0.5	38.777	24.169	14.608	40.438	24.529	15.909

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
MP-2	8	10	95	4	1	1	3	29.969	21.139	8.831	52.284	32.976	19.308
PL-1	8	8	95	4	1	1	0.5	35.065	17.96	17.104	53.026	20.256	32.77
PL-1	8	8	95	4	1	2	0.5	.	.	.	.	.	.
PL-2	8	8	95	4	1	1	0.5	35.053	17.27	17.783	52.841	18.53	34.311
PN-1	8	10	95	4	1	1	1	31.924	21.641	10.283	36.493	22.16	14.333
PN-1	8	10	95	4	1	2	1	.	.	.	.	.	.
SA-1	8	7	95	4	1	1	0.5	28.747	20.399	8.348	28.701	21.117	7.583
SA-1	8	7	95	4	1	1	12	27.985	20.154	7.832	28.643	21.126	7.517
SC-1	8	9	95	4	1	1	0.5	21.324	11.559	9.766	21.368	11.077	10.291
SC-1	8	9	95	4	1	1	8	92.701	68.76	23.941	98.557	71.601	26.956
SC-1	8	9	95	4	1	2	8	45.993	33.983	24.021	47.714	35.006	25.417
SJ-1	8	9	95	4	1	1	2	21.53	10.781	10.749	25.416	10.984	14.432
SJ-2	8	9	95	4	1	1	0.5	24.312	13.25	11.062	25.816	13.453	12.364
SJ-3	8	9	95	4	1	1	1	22.721	12.523	10.198	22.861	11.99	10.871
SJ-3	8	9	95	4	1	2	1	.	.	.	.	.	.
SJ-4	8	9	95	4	1	1	1	21.746	11.897	9.85	22.753	12.024	10.729
SJ-4	8	9	95	4	2	1	1	21.53	11.897	9.633	22.753	11.948	10.806
SJ-5	8	9	95	4	1	1	1	20.512	11.322	9.191	22.905	11.618	11.287
SJB-1	8	7	95	4	1	1	0.5	28.528	20.23	8.298	31.019	20.898	10.122
SJB-1	8	7	95	4	1	1	15	27.316	20.399	6.917	31.446	21.109	10.337
SJB-2	8	7	95	4	1	1	1	30.8	21.143	9.657	32.507	21.54	10.967
SJB-3	8	7	95	4	1	1	0.5	27.985	20.475	7.51	31.342	21.033	10.309

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
SJB-3	8	7	95	4	1	1	11	27.812	20.517	7.295	28.851	20.619	8.232
SJB-4	8	7	95	4	1	1	1	27.928	20.686	7.241	30.835	21.447	9.388
SJB-4	8	7	95	4	1	2	1	.	.	.	.	.	.
SJB-5	8	7	95	4	1	1	0.5	29.22	21.363	7.857	31.238	21.963	9.276
SJB-5	8	7	95	4	1	1	10	28.493	20.999	7.494	29.646	21.396	8.25
TL-1	8	7	95	4	1	1	0.5	28.285	19.376	8.909	32.957	20.737	12.22
TL-1	8	7	95	4	1	1	3.6	30.073	20.264	9.81	31.677	21.016	10.661
TL-2	8	8	95	4	1	1	0.5	27.975	18.979	8.996	31.212	20.187	11.025
TL-3	8	8	95	4	1	1	0.5	29.112	19.134	9.978	29.484	19.531	9.952
TL-4	8	8	95	4	1	1	0.5	32.86	20.973	11.888	35.807	21.87	13.937
TL-4	8	8	95	4	1	1	10	35.413	25.305	20.215	36.863	27.109	19.508
TL-4	8	8	95	4	2	1	10	37.223	26.997	20.452	37.815	27.48	20.669
TL-5	8	8	95	4	1	1	0.5	33.475	23.173	10.302	35.645	23.95	11.695
AO-1	8	22	95	5	1	1	0.5	26.165	23.365	2.8	25.694	23.307	2.387
AO-1	8	22	95	5	1	1	17	25.654	23.422	2.231	25.784	23.288	2.496
AO-2	8	22	95	5	1	1	0.5	24.19	22.79	1.4	25.443	23.509	1.934
AO-2	8	22	95	5	1	1	16	25.69	24.21	1.48	25.664	23.72	1.944
LC-1	8	28	95	5	1	1	0.5	26.32	24.28	2.04	26.87	24.08	2.79
LC-1	8	28	95	5	1	1	8	27.54	25.73	1.81	26.9	24.45	2.45
MP-1	8	23	95	5	1	1	1.5	30.132	27.273	2.86	32.791	27.531	5.259
MP-2	8	23	95	5	1	1	0.5	37.038	30.947	6.09	40.029	32.057	7.972
MP-2	8	23	95	5	2	1	0.5	37.901	31.55	6.351	40.883	32.45	8.433

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
MP-2	8	23	95	5	1	1	3	25.159	22.689	2.47	28.465	25.254	3.211
PL-1	8	24	95	5	1	1	0.5	33.867	24.87	8.997	39.221	25.726	13.495
PL-1	8	24	95	5	2	1	0.7	35.146	26.055	9.091	38.894	26.347	12.547
PL-2	8	24	95	5	1	1	0.5	38.339	23.299	15.039	52.506	24.183	28.323
PN-1	8	23	95	5	1	1	1	29.789	26.995	2.794	31.859	28.239	3.62
PN-1	8	23	95	5	1	2	1	.	.	.	.	.	.
SA-1	8	22	95	5	1	1	0.5	25.6	23.9	1.7	25.583	23.355	2.228
SA-1	8	22	95	5	1	1	11	26.28	24.73	1.55	26.566	24.133	2.433
SC-1	8	21	95	5	1	1	0.5	20.618	13.788	6.83	23.594	14.681	8.913
SC-1	8	21	95	5	1	1	8	37.778	35.191	5.173	39.913	36.651	6.524
SJ-1	8	21	95	5	1	1	0.5	20.493	13.174	7.319	23.729	13.836	9.893
SJ-1	8	21	95	5	2	1	0.5	21.72	13.356	8.363	24.541	13.942	10.599
SJ-2	8	21	95	5	1	1	0.5	22.667	15.181	7.486	24.116	15.488	8.628
SJ-3	8	21	95	5	1	1	1	23.353	15.334	8.018	24.357	16.419	7.938
SJ-3	8	21	95	5	1	2	1	.	.	.	.	.	.
SJ-4	8	21	95	5	1	1	1	22.783	15.142	7.64	24.299	15.766	8.533
SJ-5	8	21	95	5	1	1	1	22.328	15.536	6.792	23.488	16.89	6.598
SJB-1	8	22	95	5	1	1	0.5	24.01	22.84	1.17	25.293	23.394	1.899
SJB-1	8	22	95	5	1	1	15	25.99	24.21	1.78	26.085	23.787	2.298
SJB-2	8	22	95	5	1	1	1	26.27	24.64	1.63	26.947	24.095	2.853
SJB-3	8	22	95	5	1	1	0.5	25.56	24.01	1.55	26.265	23.365	2.901
SJB-3	8	22	95	5	1	1	12	25.96	24.25	1.71	26.707	23.941	2.766

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TDC (mg/L)	DIC (mg/L)	DOC (mg/L)	TC (mg/L)	TIC (mg/L)	TOC (mg/L)
SJB-4	8	22	95	5	1	1	1.5	27.88	25.23	2.65	29.525	24.709	4.815
SJB-4	8	22	95	5	1	2	1.5	.	.	.	.	.	.
SJB-5	8	22	95	5	1	1	0.5	25.17	23.6	1.57	26.977	24.2	2.777
SJB-5	8	22	95	5	1	1	10	26.61	25.09	1.52	26.877	24.411	2.466
TL-1	8	22	95	5	1	1	0.5	29.204	23.259	5.945	28.752	22.318	6.434
TL-1	8	22	95	5	1	1	3	26.857	23.653	3.204	27.178	23.643	3.535
TL-2	8	24	95	5	1	1	0.5	28.276	22.688	5.588	31.349	24.071	7.278
TL-3	8	24	95	5	1	1	0.5	29.079	23.111	5.968	30.685	22.547	8.138
TL-3	8	22	95	5	1	2	0.5	.	.	.	.	.	.
TL-4	8	24	95	5	1	1	0.5	28.206	23.149	5.057	30.447	23.591	6.856
TL-4	8	24	95	5	1	1	12	26.213	23.196	3.018	29.594	25.557	4.037
TL-5	8	24	95	5	1	1	1	29.634	25.049	4.585	31.557	26.206	5.351

Table C8
Solids and Chlorophyll Concentrations for Open-water Station Locations

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
AO-1	6	26	95	1	1	1	0.5	62	0	0.13
AO-1	6	26	95	1	1	1	21	60	0	0.27
AO-2	6	26	95	1	1	1	0.5	61	4	0.27
AO-2	6	26	95	1	1	1	16	54	5	1.47
LC-1	6	29	95	1	1	1	0.5	64	4	0.53
LC-1	6	29	95	1	1	2	0.5	.	.	.
LC-1	6	29	95	1	1	1	8	81	6	3.34
MP-1	6	27	95	1	1	1	1.5	61	0	28
MP-2	6	27	95	1	1	1	0.5	49	5	59.8
MP-2	6	27	95	1	1	1	3.5	64	2	43
PL-1	6	28	95	1	1	1	0.5	45	2	34.7
PL-2	6	28	95	1	1	1	0.5	92	24	50.1
PN-1	6	27	95	1	1	1	1.5	89	0	29.1
SA-1	6	26	95	1	1	1	0.5	54	1	5.34
SA-1	6	26	95	1	1	1	12.5	64	6	17.6
SC-1	6	28	95	1	1	1	0.5	31	0	.
SC-1	6	28	95	1	1	1	8	52	6	3.47
SJ-1	6	28	95	1	1	1	1	20	2	29.1
SJ-2	6	28	95	1	1	1	0.5	32	1	26.2
SJ-3	6	28	95	1	1	1	1	21	0	14.7

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
SJ-4	6	28	95	1	1	1	1	20	1	15.2
SJ-5	6	28	95	1	1	1	0.5	26	0	15.8
SJ-5	6	28	95	1	1	1	6	56	6	32
SJB-1	6	26	95	1	1	1	0.5	65	7	0.27
SJB-1	6	26	95	1	1	1	14.5	65	5	0.27
SJB-2	6	26	95	1	1	1	0.5	78	5	5.61
SJB-3	6	26	95	1	1	1	0.5	69	2	4.2
SJB-3	6	26	95	1	1	1	12	63	5	3.74
SJB-4	6	26	95	1	1	1	0.5	68	3	28
SJB-5	6	26	95	1	1	1	0.5	65	6	11.5
SJB-5	6	26	95	1	1	1	11	72	7	21.4
TL-1	6	26	95	1	1	1	1.5	67	4	0.93
TL-2	6	29	95	1	1	1	0.5	50	5	6.68
TL-3	6	29	95	1	1	1	0.5	57	7	9.88
TL-4	6	29	95	1	1	1	0.5	51	6	23.8
TL-4	6	29	95	1	1	1	13	67	5	2.4
TL-5	6	28	95	1	1	1	0.5	66	10	57
AO-1	7	10	95	2	1	1	0.5	83	6	0.67
AO-1	7	10	95	2	1	1	21	71	10	0.13
AO-2	7	10	95	2	1	1	0.5	61	2	0.53
AO-2	7	10	95	2	1	1	21	68	1	0.13
LC-1	7	13	95	2	1	1	0.5	76	7	0.67

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
LC-1	7	13	95	2	1	1	6	198	37	0.22
MP-1	7	13	95	2	1	1	1.5	78	7	54.5
MP-2	7	13	95	2	1	1	0.5	61	7	7.57
MP-2	7	13	95	2	1	1	4	77	11	16.3
PL-1	7	12	95	2	1	1	1	62	9	43.2
PL-2	7	12	95	2	1	1	0.5	116	28	31.5
PL-2	7	12	95	2	2	1	0.5	89	24	34.7
PN-1	7	13	95	2	1	1	1	75	9	.
PN-1	7	13	95	2	2	1	1	76	6	5.84
SA-1	7	10	95	2	1	1	0.5	66	2	4.81
SA-1	7	10	95	2	1	1	12	82	8	2.67
SC-1	7	11	95	2	1	1	0.5	43	3	29.4
SC-1	7	11	95	2	1	1	9	69	17	2.05
SJ-1	7	11	95	2	1	1	0.5	32	1	37.6
SJ-2	7	11	95	2	1	1	0.5	36	8	103.5
SJ-3	7	11	95	2	1	1	0.5	36	3	9.08
SJ-4	7	11	95	2	1	1	1	30	0	4.84
SJ-4	7	11	95	2	2	1	1	35	4	3.74
SJ-5	7	11	95	2	1	1	0.5	49	2	.
SJ-5	7	11	95	2	1	1	3	56	6	22.2
SJB-1	7	10	95	2	1	1	0.5	74	4	1.47
SJB-1	7	10	95	2	1	1	16	70	7	0.27

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
SJB-2	7	10	95	2	1	1	0.5	77	8	5.34
SJB-3	7	10	95	2	1	1	0.5	78	4	4.81
SJB-3	7	10	95	2	1	2	0.5	.	.	.
SJB-3	7	10	95	2	2	1	0.5	72	0	3.2
SJB-3	7	10	95	2	3	1	0.5	.	.	.
SJB-3	7	10	95	2	1	1	11	80	5	2.67
SJB-3	7	10	95	2	1	2	11	.	.	.
SJB-4	7	10	95	2	1	1	1.5	81	6	6.9
SJB-5	7	13	95	2	1	1	0.5	87	10	3.34
SJB-5	7	13	95	2	1	1	11	85	9	3.07
TL-1	7	10	95	2	1	1	1.5	75	10	4.77
TL-2	7	12	95	2	1	1	0.5	82	14	7.12
TL-3	7	12	95	2	1	1	0.5	85	10	14.7
TL-4	7	12	95	2	1	1	1.5	71	8	26.4
TL-5	7	12	95	2	1	1	1	64	10	15.1
AO-1	7	24	95	3	1	1	0.5	84	7	.
AO-1	7	24	95	3	1	1	18	93	10	.
AO-2	7	24	95	3	1	1	0.5	94	10	.
AO-2	7	24	95	3	1	1	18	100	9	0
LC-1	7	31	95	3	1	1	0.5	63	10	0.13
LC-1	7	31	95	3	2	1	0.5	47	10	0.8
LC-1	7	31	95	3	1	1	7	74	10	1.33

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
LC-1	7	31	95	3	1	2	7	63	9	.
MP-1	7	27	95	3	1	1	0.5	48	6	34.7
MP-1	7	27	95	3	1	1	3	83	17	67.4
MP-1	7	27	95	3	1	2	3	106	17	.
MP-2	7	27	95	3	1	1	0.5	27	0	56.7
MP-2	7	27	95	3	1	1	3	87	9	15
PL-1	7	25	95	3	1	1	0.5	58	7	133.5
PL-2	7	25	95	3	1	1	0.5	72	13	72.7
PN-1	7	27	95	3	1	1	1	2	0	2.67
SA-1	7	24	95	3	1	1	0.5	100	11	4.17
SA-1	7	24	95	3	1	1	11	94	6	2.54
SC-1	7	26	95	3	1	1	0.5	34	1	18.7
SC-1	7	26	95	3	1	1	8	10	0	1.87
SJ-1	7	26	95	3	1	1	1	41	4	23.6
SJ-2	7	26	95	3	1	1	0.5	35	3	70
SJ-3	7	26	95	3	1	1	1	34	3	1
SJ-3	7	26	95	3	2	1	1	40	3	0.27
SJ-4	7	26	95	3	1	1	1	41	6	0.18
SJ-5	7	26	95	3	1	1	0.5	29	2	19.7
SJ-5	7	26	95	3	1	1	5	67	9	11
SJB-1	7	24	95	3	1	1	0.5	77	10	3.12
SJB-1	7	24	95	3	1	1	16	87	11	.

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
SJB-2	7	24	95	3	1	1	1	113	14	4.03
SJB-3	7	24	95	3	1	1	0.5	95	12	1.6
SJB-3	7	24	95	3	1	1	11	101	10	2.4
SJB-4	7	24	95	3	1	1	1.5	119	13	11.2
SJB-4	7	24	95	3	2	1	1.5	89	10	18
SJB-5	7	24	95	3	1	1	0.5	92	12	9.61
SJB-5	7	24	95	3	1	1	11	110	11	3.17
TL-1	7	24	95	3	1	1	1.5	69	6	6.68
TL-2	7	25	95	3	1	1	0.5	63	4	4.45
TL-3	7	25	95	3	1	1	0.5	61	4	19.1
TL-4	7	25	95	3	1	1	1	92	9	39.2
TL-5	7	25	95	3	1	1	0.5	66	2	40.9
AO-1	8	7	95	4	1	1	0.5	63	6	0.27
AO-1	8	7	95	4	1	1	18	69	7	0.4
AO-2	8	7	95	4	1	1	0.5	66	8	0.13
AO-2	8	7	95	4	1	1	15	63	6	0.13
LC-1	8	10	95	4	1	1	0.5	68	1	2
LC-1	8	10	95	4	2	1	0.5	68	5	1.07
LC-1	8	10	95	4	1	1	5	75	7	2.27
MP-1	8	10	95	4	1	1	0.5	51	3	7.74
MP-1	8	10	95	4	1	1	3	74	3	14.2
MP-2	8	10	95	4	1	1	0.5	59	3	5.87

Sheet 6 of 10

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
MP-2	8	10	95	4	1	1	3	72	10	46.5
PL-1	8	8	95	4	1	1	0.5	100	25	74.8
PL-1	8	8	95	4	1	2	0.5	102	28	.
PL-2	8	8	95	4	1	1	0.5	92	24	40
PN-1	8	10	95	4	1	1	1	67	6	49.4
PN-1	8	10	95	4	1	2	1	.	.	.
SA-1	8	7	95	4	1	1	0.5	73	6	1.56
SA-1	8	7	95	4	1	1	12	72	8	2
SC-1	8	9	95	4	1	1	0.5	27	3	17.1
SC-1	8	9	95	4	1	1	8	90	31	1.72
SC-1	8	9	95	4	1	2	8	.	.	.
SJ-1	8	9	95	4	1	1	2	128	4	41.1
SJ-2	8	9	95	4	1	1	0.5	37	4	51.5
SJ-3	8	9	95	4	1	1	1	30	6	1.87
SJ-3	8	9	95	4	1	2	1	27	1	.
SJ-4	8	9	95	4	1	1	1	34	1	2.1
SJ-4	8	9	95	4	2	1	1	36	3	2.67
SJ-5	8	9	95	4	1	1	1	32	2	29.1
SJB-1	8	7	95	4	1	1	0.5	63	5	1.07
SJB-1	8	7	95	4	1	1	15	75	7	0.33
SJB-2	8	7	95	4	1	1	1	65	7	5.61
SJB-3	8	7	95	4	1	1	0.5	72	12	0.89

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
SJB-3	8	7	95	4	1	1	11	70	6	3.47
SJB-4	8	7	95	4	1	1	1	73	4	2.86
SJB-4	8	7	95	4	1	2	1	70	8	.
SJB-5	8	7	95	4	1	1	0.5	64	12	3.56
SJB-5	8	7	95	4	1	1	10	77	10	1.07
TL-1	8	7	95	4	1	1	0.5	64	10	2.67
TL-1	8	7	95	4	1	1	3.6	82	11	3.62
TL-2	8	8	95	4	1	1	0.5	76	9	6.45
TL-3	8	8	95	4	1	1	0.5	93	12	6.45
TL-4	8	8	95	4	1	1	0.5	55	4	21.4
TL-4	8	8	95	4	1	1	10	100	14	0.8
TL-4	8	8	95	4	2	1	10	87	11	4.39
TL-5	8	8	95	4	1	1	0.5	72	6	85.4
AO-1	8	22	95	5	1	1	0.5	66	5	0.67
AO-1	8	22	95	5	1	1	17	66	12	0.53
AO-2	8	22	95	5	1	1	0.5	72	9	0.4
AO-2	8	22	95	5	1	1	16	65	5	0.4
LC-1	8	28	95	5	1	1	0.5	75	7	3.2
LC-1	8	28	95	5	1	1	8	84	11	4.81
MP-1	8	23	95	5	1	1	1.5	63	9	59.5
MP-2	8	23	95	5	1	1	0.5	51	9	34.2
MP-2	8	23	95	5	2	1	0.5	40	8	30.2

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
MP-2	8	23	95	5	1	1	3	66	5	17.4
PL-1	8	24	95	5	1	1	0.5	52	5	68.8
PL-1	8	22	95	5	2	1	0.7	55	0	54.7
PL-2	8	24	95	5	1	1	0.5	73	22	117.4
PN-1	8	23	95	5	1	1	1	69	6	45.4
PN-1	8	23	95	5	1	2	1	67	7	.
SA-1	8	22	95	5	1	1	0.5	63	7	2.4
SA-1	8	22	95	5	1	1	11	68	10	1.84
SC-1	8	21	95	5	1	1	0.5	35	5	.
SC-1	8	21	95	5	1	1	8	67	7	2.8
SJ-1	8	21	95	5	1	1	0.5	45	13	95.6
SJ-1	8	21	95	5	2	1	0.5	36	8	88.4
SJ-2	8	21	95	5	1	1	0.5	38	9	31.5
SJ-3	8	21	95	5	1	1	1	43	8	53.4
SJ-3	8	21	95	5	1	2	1	44	7	.
SJ-4	8	21	95	5	1	1	1	47	9	46.2
SJ-5	8	21	95	5	1	1	1	40	4	25.4
SJB-1	8	22	95	5	1	1	0.5	59	6	4.81
SJB-1	8	22	95	5	1	1	15	63	6	3.07
SJB-2	8	22	95	5	1	1	1	72	15	8.54
SJB-3	8	22	95	5	1	1	0.5	57	10	6.94
SJB-3	8	22	95	5	1	1	12	62	8	5.34

Station	Month	Day	Year	Round	Rep	Split	Depth (m)	TSS (mg/L)	VSS (mg/L)	CHLA (ug/L)
SJB-4	8	22	95	5	1	1	1.5	63	5	38.4
SJB-4	8	22	95	5	1	2	1.5	70	12	.
SJB-5	8	22	95	5	1	1	0.5	69	12	10.6
SJB-5	8	22	95	5	1	1	10	75	7	5.07
TL-1	8	22	95	5	1	1	0.5	50	6	14.7
TL-1	8	24	95	5	1	1	3	56	7	3.6
TL-2	8	24	95	5	1	1	0.5	58	5	14.2
TL-3	8	24	95	5	1	1	0.5	66	10	29.4
TL-3	8	22	95	5	1	2	0.5	66	8	.
TL-4	8	24	95	5	1	1	0.5	62	7	32
TL-4	8	24	95	5	1	1	12	88	16	1.34
TL-5	8	24	95	5	1	1	1	62	8	11.2

Table C9
Fecal Coliform Enumeration Data for Open-water Sampling Locations

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
AO-1	6	26	95	1	1	0.5	-888	<2
AO-2	6	26	95	1	1	0.5	27	
SJB-1	6	26	95	1	1	0.5	8	
SJB-1	6	26	95	1	1	14.5	.	
SJB-2	6	26	95	1	1	0.5	-888	<2
SJB-3	6	26	95	1	1	0.5	-888	<2
SJB-3	6	26	95	1	1	12	.	
SJB-4	6	26	95	1	1	0.5	-888	<2
SJB-5	6	26	95	1	1	0.5	-888	<2
SJB-5	6	26	95	1	1	11	.	
SA-1	6	26	95	1	1	0.5	23	
SA-1	6	26	95	1	1	12.5	.	
LC-1	6	29	95	1	1	0.5	-888	<2
LC-1	6	29	95	1	1	8	80	
PN-1	6	27	95	1	1	1.5	5400	
MP-1	6	27	95	1	1	1.5	790	
MP-1	6	27	95	1	1	3	.	
MP-2	6	27	95	1	1	0.5	24000	

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* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
MP-2	6	27	95	1	1	3.5	230	
SJ-1	6	28	95	1	1	1	3000	
SJ-2	6	28	95	1	1	0.5	9000	
SJ-3	6	28	95	1	1	1	-888	>160000
SJ-4	6	28	95	1	1	1	20	
SJ-5	6	28	95	1	1	0.5	140	
SJ-5	6	28	95	1	1	6	-888	<2
SC-1	6	28	95	1	1	0.5	23	
SC-1	6	28	95	1	1	8	-888	<2
TL-1	6	26	95	1	1	1.5	240	
TL-1	6	26	95	1	1	3.6	.	
TL-2	6	29	95	1	1	0.5	2	
TL-3	6	29	95	1	1	0.5	110	
TL-4	6	29	95	1	1	0.5	240	
TL-4	6	29	95	1	1	13	-888	<2
TL-5	6	28	95	1	1	0.5	23	
PL-1	6	28	95	1	1	0.5	230	
PL-2	6	28	95	1	1	0.5	-888	<2
AO-1	7	10	95	1	1	0.5	-888	<20
AO-2	7	10	95	1	1	0.5	-888	<20

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* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
SJB-1	7	10	95	1	1	0.5	-888	<20
SJB-1	7	10	95	1	1	14.5	-888	<20
SJB-2	7	10	95	1	1	0.5	-888	<20
SJB-3	7	10	95	1	1	0.5	-888	<20
SJB-3	7	10	95	1	1	12	-888	<20
SJB-4	7	10	95	1	1	0.5	-888	<20
SJB-5	7	13	95	1	1	0.5	230	
SJB-5	7	13	95	1	1	11	230	
SA-1	7	10	95	1	1	0.5	-888	<20
SA-1	7	10	95	1	1	12.5	-888	<20
LC-1	7	13	95	1	1	0.5	-888	<20
LC-1	7	13	95	1	1	8	230	
PN-1	7	13	95	1	1	1.5	5000	
MP-1	7	13	95	1	1	1.5	2400	
MP-1	7	13	95	1	1	3	.	
MP-2	7	13	95	1	1	0.5	-888	>16000
MP-2	7	13	95	1	1	3.5	-888	<20
SJ-1	7	11	95	1	1	1	40	
SJ-2	7	11	95	1	1	0.5	-888	>16000
SJ-3	7	11	95	1	1	1	2400	

* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
SJ-4	7	11	95	1	1	1	-888	<20
SJ-5	7	11	95	1	1	0.5	300	
SJ-5	7	11	95	1	1	6	-888	<20
SC-1	7	11	95	1	1	0.5	230	
SC-1	7	11	95	1	1	8	-888	<20
TL-1	7	10	95	1	1	1.5	-888	<20
TL-1	7	10	95	1	1	3.6	.	
TL-2	7	12	95	1	1	0.5	110	
TL-3	7	12	95	1	1	0.5	500	
TL-4	7	12	95	1	1	0.5	-888	<20
TL-4	7	12	95	1	1	13	.	
TL-5	7	12	95	1	1	0.5	-888	<20
PL-1	7	12	95	1	1	0.5	-888	<20
PL-2	7	12	95	1	1	0.5	-888	<20
AO-1	7	24	95	1	1	0.5	-888	<20
AO-2	7	24	95	1	1	0.5	-888	<20
SJB-1	7	24	95	1	1	0.5	-888	<20
SJB-1	7	24	95	1	1	14.5	-888	<20
SJB-2	7	24	95	1	1	0.5	130	
SJB-3	7	24	95	1	1	0.5	2400	

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* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
SJB-3	7	24	95	1	1	12	80	
SJB-4	7	24	95	1	1	0.5	230	
SJB-5	7	24	95	1	1	0.5	2400	
SJB-5	7	24	95	1	1	11	-888	<20
SA-1	7	24	95	1	1	0.5	-888	<20
SA-1	7	24	95	1	1	12.5	230	
LC-1	7	31	95	1	1	0.5	-888	<20
LC-1	7	31	95	1	1	8	-888	<20
PN-1	7	27	95	1	1	1.5	240000	
MP-1	7	27	95	1	1	1.5	240000	
MP-1	7	27	95	1	1	3	2300	
MP-2	7	27	95	1	1	0.5	240000	
MP-2	7	27	95	1	1	3.5	24000	
SJ-1	7	26	95	1	1	1	270	
SJ-2	7	26	95	1	1	0.5	-888	>16000
SJ-3	7	26	95	1	1	1	-888	<20
SJ-4	7	26	95	1	1	1	-888	<20
SJ-5	7	26	95	1	1	0.5	-888	<20
SJ-5	7	26	95	1	1	6	-888	<20
SC-1	7	26	95	1	1	0.5	-888	<20

* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
SC-1	7	26	95	1	1	8	-888	<20
TL-1	7	24	95	1	1	1.5	230	
TL-1	7	24	95	1	1	3.6	.	
TL-2	7	25	95	1	1	0.5	220	
TL-3	7	25	95	1	1	0.5	140	
TL-4	7	25	95	1	1	0.5	-888	<20
TL-4	7	25	95	1	1	13	.	
TL-5	7	25	95	1	1	0.5	140	
PL-1	7	25	95	1	1	0.5	70	
PL-2	7	25	95	1	1	0.5	-888	<20
AO-1	8	7	95	1	1	0.5	-888	<20
AO-2	8	7	95	1	1	0.5	-888	<20
SJB-1	8	7	95	1	1	0.5	230	
SJB-1	8	7	95	1	1	14.5	500	
SJB-2	8	7	95	1	1	0.5	170	
SJB-3	8	7	95	1	1	0.5	500	
SJB-3	8	7	95	1	1	12	80	
SJB-4	8	7	95	1	1	0.5	1100	
SJB-5	8	7	95	1	1	0.5	-888	>1600000
SJB-5	8	7	95	1	1	11	300	

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* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
SA-1	8	7	95	1	1	0.5	40	
SA-1	8	7	95	1	1	12.5	230	
LC-1	8	10	95	1	1	0.5	230	
LC-1	8	10	95	1	1	8	-888	<20
PN-1	8	10	95	1	1	1.5	24000	
MP-1	8	10	95	1	1	1.5	-888	>160000
MP-1	8	10	95	1	1	3	24000	
MP-2	8	10	95	1	1	0.5	-888	>160000
MP-2	8	10	95	1	1	3.5	1300	
SJ-1	8	9	95	1	1	1	1300	
SJ-2	8	9	95	1	1	0.5	14000	
SJ-3	8	9	95	1	1	1	700	
SJ-4	8	9	95	1	1	1	-888	<20
SJ-5	8	9	95	1	1	0.5	80	
SJ-5	8	9	95	1	1	6	.	
SC-1	8	9	95	1	1	0.5	230	
SC-1	8	9	95	1	1	8	-888	<20
TL-1	8	7	95	1	1	1.5	500	
TL-1	8	7	95	1	1	3.6	-888	<20
TL-2	8	8	95	1	1	0.5	230	

* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
TL-3	8	8	95	1	1	0.5	80	
TL-4	8	8	95	1	1	0.5	9000	
TL-4	8	8	95	1	1	13	-888	<20
TL-5	8	8	95	1	1	0.5	300	
PL-1	8	8	95	1	1	0.5	5000	
PL-2	8	8	95	1	1	0.5	-888	<20
AO-1	8	22	95	1	1	0.5	800	
AO-2	8	22	95	1	1	0.5	-888	<20
SJB-1	8	22	95	1	1	0.5	230	
SJB-1	8	22	95	1	1	14.5	230	
SJB-2	8	22	95	1	1	0.5	130	
SJB-3	8	22	95	1	1	0.5	24000	
SJB-3	8	22	95	1	1	12	-888	<20
SJB-4	8	22	95	1	1	0.5	-888	<20
SJB-5	8	22	95	1	1	0.5	230	
SJB-5	8	22	95	1	1	11	230	
SA-1	8	22	95	1	1	0.5	80	
SA-1	8	22	95	1	1	12.5	230	
LC-1	8	25	95	1	1	0.5	-888	<20
LC-1	8	25	95	1	1	8	-888	<20

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* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
PN-1	8	23	95	1	1	1.5	-888	>160000
MP-1	8	23	95	1	1	1.5	500	
MP-1	8	23	95	1	1	3	.	
MP-2	8	23	95	1	1	0.5	8000	
MP-2	8	23	95	1	1	3.5	1300	
SJ-1	8	21	95	1	1	1	800	
SJ-2	8	21	95	1	1	0.5	2400	
SJ-3	8	21	95	1	1	1	2400	
SJ-4	8	21	95	1	1	1	-888	<20
SJ-5	8	21	95	1	1	0.5	-888	<20
SJ-5	8	21	95	1	1	6	.	
SC-1	8	21	95	1	1	0.5	230	
SC-1	8	21	95	1	1	8	-888	<20
TL-1	8	22	95	1	1	1.5	40	
TL-1	8	22	95	1	1	3.6	-888	<20
TL-2	8	24	95	1	1	0.5	230	
TL-3	8	24	95	1	1	0.5	9000	
TL-4	8	24	95	1	1	0.5	800	
TL-4	8	24	95	1	1	13	-888	<20
TL-5	8	24	95	1	1	0.5	270	

* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
PL-1	8	24	95	1	1	0.5	8000	
PL-2	8	24	95	1	1	0.5	2400	

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* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Table C10
Fecal Coliform Enumeration Data for Tributary Sampling Locations

Station	Month	Day	Year	Rep	Split	Depth (m)	FecCol (MPN/100 ml)*	FecSub
T-1	7	5	95	1	1	.	-888	>160000
T-2	7	5	95	1	1	.	-888	>160000
T-3	7	5	95	1	1	.	1600000	
T-4	7	5	95	1	1	.	1600000	
T-5	7	5	95	1	1	.	1600000	
T-6	7	5	95	1	1	.	1600000	
T-7	7	5	95	1	1	.	1600000	
T-8	7	5	95	1	1	.	-888	<200
T-1	7	17	95	1	1	.	-888	>16000
T-2	7	17	95	1	1	.	-888	>16000
T-3	7	17	95	1	1	.	-888	>16000
T-4	7	17	95	1	1	.	-888	>16000
T-5	7	17	95	1	1	.	-888	>16000
T-6	7	17	95	1	1	.	-888	>16000
T-7	7	17	95	1	1	.	-888	>16000
T-8	7	17	95	1	1	.	230	

* Value of -888 indicates limit of measurement not met (<) or exceeded (>). See FECSUB for measurement limit value (in MPN/100mL)

Appendix D
Sediment-Water Flux Data

Table D1
Sediment-Water Flux Data

Station	Month	Day	Year	Rep	Split	Depth (m)	Temp (C)	SOC (g/m2/d)	NH4 (µg-at/m2/h	NO3NO2 (µg-at/m2/h)	NO2 (µg-at/m2/h)	PO4 (µg-at/m2/h)	Si (µg-at/m2/h)
SOS-1	8	10	95	1	1	1.5	31	1.32	413.14	0	0	79.06	362.26
SOC-2	8	10	95	1	1	1.7	30	1.16	13.05	43.05	-2.25	-38.68	0
SJC-3	8	11	95	1	1	11.6	29	1.43	106.03	0	0	0.88	283.2
SJS-4	8	11	95	1	1	3.9	30	1.33	78.15	0	1.3	2.37	125.17
SJW-5	8	12	95	1	1	1.7	31.4	1	-27.48	0	0	0	0
SJW-6	8	12	95	1	1	1.7	31.4	1.23	-6.91	0	0	0	131.56
TL-7	8	14	95	1	1	1	31.8	1.21	160.06	0	0	6.7	253.43
SC-8	8	14	95	1	1	3.8	31.8	1.13	-42.97	-1.56	-1.42	1.51	172.59
PL-9	8	15	95	1	1	0.7	30.5	1.3	48.65	0	0	-1.39	533.46
PL-10	8	15	95	1	1	0.7	30.5	1.93	0	0	0	0	551.09

Appendix E
QA/QC Data for Laboratory Analyses

Table E1
QA/QC Data for Laboratory Analyses

Value	Sample	Month	Day	Year	Rep	Split	Depth	Spkval	Samval	Spkamt	Recov
NH3N	SA-1	6	26	95	1	1	12.5	0.44	0.22	0.2	110
NH3N	MP-1	6	27	95	1	1	1.5	0.497	0.249	0.2	124
NH3N	SJ-3	6	28	95	1	1	1	0.518	0.321	0.2	98.5
NH3N	LC-1	6	29	95	1	1	0.5	0.438	0.229	0.2	104.5
NH3N	T-1	7	5	95	1	1	-999	0.897	0.698	0.2	99.5
NH3N	SA-1	7	10	95	1	1	12.5	0.594	0.372	0.2	111
NH3N	SJ-1	7	11	95	1	1	1	0.248	0.053	0.2	97.5
NH3N	PL-2	7	12	95	2	1	0.5	0.209	0.016	0.2	96.5
NH3N	PN-1	7	13	95	2	1	1	0.376	0.178	0.2	99
NH3N	T-2	7	17	95	1	1	-999	0.427	0.202	0.2	112.5
NH3N	SJB-4	7	24	95	2	1	1.5	0.22	0.037	0.2	91.5
NH3N	PN-1	7	27	95	1	1	1	0.595	0.386	0.2	104.5
NH3N	-999	-999	-999	-999	-999	-999	-999	0.459	0.246	0.2	106.5
NH3N	LC-1	7	31	95	1	1	0.5	0.225	0	0.2	112.5
NH3N	SJB-3	8	7	95	1	1	11	0.464	0.242	0.2	111
NH3N	TL-2	8	8	95	1	1	0.5	0.441	0.259	0.2	91
NH3N	SJ-5	8	9	95	1	1	1	0.295	0.108	0.2	93.5
NH3N	T-3	8	16	95	1	1	-999	0.633	0.443	0.2	95
NH3N	SJ-4	8	21	95	1	1	1	0.751	0.488	0.2	131.5
NH3N	SA-1	8	22	95	1	1	11	0.307	0.054	0.2	126.5

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Value	Sample	Month	Day	Year	Rep	Split	Depth	Spkval	Samval	Spkamt	Recov
NH3N	MP-1	8	23	95	1	1	1.5	1.06	0.897	0.2	91.5
NH3N	TL-2	8	24	95	1	1	0.5	0.578	0.351	0.2	113.5
NH3N	LC-1	8	28	95	1	1	0.5	0.764	0.412	0.2	176
NH3N	C-5	8	28	95	-999	-999	-999	0.554	0.28	0.2	137
NH3N	E-12	9	1	95	-999	-999	-999	0.89	0.65	0.2	120
NO3N	T-8	7	5	95	1	1	-999	0.3	0.1	0.2	145
NO3N	SJB-2	7	10	95	1	1	0.5	0.34	0	0.2	170
NO3N	SJ-4	7	11	95	1	1	1	0.41	0	0.4	102.5
NO3N	TL-4	7	12	95	1	1	1.5	0.13	0	0.2	65
NO3N	MP-1	7	13	95	1	1	1.5	0.2	0	0.2	100
NO3N	PN-1	7	13	95	1	1	1	0.13	0.01	0.2	60
NO3N	LC-1	7	13	95	1	1	0.5	0.1	0	0.2	50
NO3N	T-4	7	17	95	1	1	-999	0.73	0.59	0.2	70
NO3N	T-3	7	17	95	1	1	-999	0.65	0.52	0.2	65
NO3N	SJB-2	7	24	95	1	1	1	0.11	0	0.2	55
NO3N	TL-2	7	25	95	1	1	0.5	0.16	0	0.2	80
NO3N	SJ-1	7	26	95	1	1	1	0.21	0	0.2	105
NO3N	T-4	7	14	95	1	1	-999	0.67	0.51	0.2	80
NO3N	MP-2	7	27	95	1	1	0.5	0.25	0.04	0.2	105
NO3N	SJB-1	8	7	95	1	1	0.5	0.15	0	0.2	75
NO3N	TL-2	8	8	95	1	1	0.5	0.19	0	0.2	95
NO3N	SJ-1	8	9	95	1	1	2	0.16	0.01	0.2	75

Value	Sample	Month	Day	Year	Rep	Split	Depth	Spkval	Samval	Spkamt	Recov
NO3N	LC-1	8	10	95	1	1	0.5	0.19	0	0.2	95
NO3N	T-3	8	6	95	1	1	-999	0.53	0.3	0.2	115
NO3N	SJ-2	8	20	95	1	1	0.5	0.05	0	0.2	25
NO3N	SJB-2	8	22	95	1	1	1	0.22	0	0.2	110
NO3N	MP-1	8	23	95	1	1	1.5	0.2	0.01	0.2	95
NO3N	TL-2	8	24	95	1	1	0.5	0.14	0.01	0.2	65
NO3N	C-4	8	17	95	-999	-999	-999	1.5	1.2	0.2	150
NO3N	D-8	8	20	95	-999	-999	-999	0.82	0.5	0.2	160
NO3N	E-10	9	1	95	-999	-999	-999	0.79	0.6	0.2	95
TKN	AO-1	7	17	95	1	1	0.5	0.606	0.307	0.3	99.6
TKN	LC-1	7	17	95	1	1	6	0.625	0.318	0.3	102.3
TKN	SJB-5	7	18	95	1	1	11	0.746	0.403	0.3	114.3
TKN	SA-1	7	18	95	1	1	0.5	0.731	0.321	0.3	136.6
TKN	SA-1	7	18	95	1	1	12	0.646	0.37	0.3	92
TKN	PL-1	7	24	95	1	1	0.5	0.84	0.472	0.3	122.6
TKN	PL-2	7	24	95	1	1	0.5	1.09	0.707	0.3	127.6
TKN	TL-3	7	24	95	1	1	0.5	0.757	0.362	0.3	131.6
TKN	T-7	7	26	95	1	1	-999	3.12	2.76	0.3	120
TKN	T-4	7	27	95	1	1	-999	1.3	0.952	0.3	116
TKN	LC-1	8	7	95	1	1	0.5	0.506	0.265	0.3	80.3
TKN	LC-1	8	7	95	2	1	0.5	0.543	0.255	0.3	96
TKN	PL-1	8	14	95	1	1	0.5	1.01	0.698	0.3	104

Value	Sample	Month	Day	Year	Rep	Split	Depth	Spkval	Samval	Spkamt	Recov
TKN	PL-2	8	14	95	1	1	0.5	1.2	0.904	0.3	98.6
TKN	SJB-4	8	15	95	2	1	1	0.662	0.326	0.3	112
TKN	TL-1	8	15	95	1	1	3.6	0.658	0.358	0.3	100
TKN	SJ-5	8	18	95	1	1	1	1.01	0.703	0.3	102.3
TKN	T-3	8	21	95	1	1	-999	1.03	0.757	0.3	91
TKN	T-3	8	31	95	1	1	-999	1.62	1.34	0.3	93.3
TKN	AO-2	9	7	95	1	1	16	0.546	0.378	0.3	56
TKN	SA-1	9	7	95	1	1	11	0.642	0.358	0.3	94.6
TKN	SJ-2	9	8	95	1	1	0.5	0.99	0.662	0.3	109.3
TKN	PL-2	9	11	95	1	1	0.5	1.48	1.09	0.3	130
TKN	AO-1	9	11	95	1	1	17	0.642	0.33	0.3	104
TP	AO-2	6	26	95	1	1	166	0.04	0.009	0.025	121.6
TP	SJB-1	7	10	95	1	1	0.5	0.082	0.046	0.025	142.8
TP	TL-3	7	11	95	1	1	0.5	0.053	0.024	0.025	116
TP	TL-1	7	26	95	1	1	1.5	0.081	0.054	0.025	108
TP	TL-3	7	25	95	1	1	0.5	0.128	0.097	0.025	124
TP	SJ-3	7	26	95	1	1	1	0.16	0.129	0.025	124
TP	SA-1	8	7	95	1	1	12	0.058	0.022	0.025	144
TP	MP-1	8	23	95	1	1	1.5	0.207	0.181	0.025	107.2
TP	C-4	8	21	95	-999	-999	-999	0.255	0.21	0.025	180.4
TP	D-7	8	21	95	-999	-999	-999	0.043	0.011	0.025	128
TDP	AO-1	7	24	95	1	1	0.5	0.035	0.004	0.025	124

Value	Sample	Month	Day	Year	Rep	Split	Depth	Spkval	Samval	Spkamt	Recov
TDP	PN-1	7	27	95	1	1	1	0.203	0.173	0.025	120
TDP	TL-2	8	8	95	1	1	0.5	0.047	0.02	0.025	108
TDP	SJ-1	8	9	95	1	1	2	0.056	0.026	0.025	120
TDP	T-3	8	17	95	1	1	-999	0.029	0.002	0.025	107.2
TDP	LC-1	8	10	95	1	1	0.5	0.038	0.008	0.025	120
TDP	SJ-4	8	21	95	1	1	1	0.102	0.074	0.025	112
TDP	SJB-2	8	23	95	1	1	1	0.051	0.019	0.025	126.8
TDP	TL-2	8	24	95	1	1	0.5	0.037	0.025	0.025	48
TDP	C-4	8	19	95	-999	-999	-999	0.137	0.104	0.025	132
TDP	E-12	9	1	95	-999	-999	-999	0.092	0.056	0.025	144
TIP	MP-1	6	26	95	1	1	1.5	0.089	0.062	0.025	108
TIP	SJ-4	7	11	95	1	1	1	0.158	0.124	0.025	136
TIP	TL-2	7	12	95	1	1	0.5	0.058	0.028	0.025	120
TIP	LC-1	7	13	95	1	1	7	0.047	0.016	0.025	124
TIP	SA-1	7	24	95	1	1	0.5	0.037	0.007	0.025	120
TIP	SJB-3	6	26	95	1	1	12	0.063	0.028	0.025	138
TIP	AO-1	8	7	95	1	1	18	0.031	0	0.025	124
TIP	SJ-1	8	9	95	1	1	2	0.131	0.101	0.025	119.2
TIP	LC-1	8	10	95	1	1	5	0.03	0.004	0.025	104
TIP	MP-1	8	23	95	1	1	1.5	0.154	0.119	0.025	140
TIP	TL-2	8	24	95	1	1	0.5	0.072	0.04	0.025	128
DIP	SJB-3	6	26	95	1	1	0.5	0.036	0.012	0.025	96

Value	Sample	Month	Day	Year	Rep	Split	Depth	Spkval	Samval	Spkamt	Recov
DIP	SJB-1	7	24	95	1	1	0.5	0.035	0.003	0.025	128
DIP	T-2	7	17	95	1	1	-999	0.057	0.028	0.025	116
DIP	MP-1	7	27	95	1	1	3	0.044	0.012	0.025	128
DIP	SA-1	8	7	95	1	1	0.5	0.035	0.008	0.025	108
DIP	LC-1	8	10	95	2	1	0.5	0.028	0.002	0.025	104
DIP	SA-1	8	22	95	1	1	11	0.035	0.004	0.025	124

Appendix F
Glossary of Variable Names

Variable	Description	Units
CHLA	Chlorophyll A	ug/L
DAY	Day	day(1-31)
DEPTH	Depth	m
DIC	Dissolved Inorganic Carbon	mg/L
DIP	Dissolved Inorganic Phosphorus	mg/L
DISCHARGE	Tributary Discharge	m^3/sec
DO	Dissolved Oxygen	mg/L
DOC	Dissolved Organic Carbon	mg/L
DOSAT	Dissolved Oxygen, Saturation	percent
DTKN	Total Dissolved Kjeldahl Nitrogen	mg/L
EVENT	Event Counter	
FECCOL	Fecal Coliform	MPN/100 mL
FECSUB	Fecal Coliform Limit of Measurement	MPN/100 mL
INCUB	Type of Incubation	
LATDEG	Latitude	degrees
LATDIR	Latitude Direction (N=North)	
LATMIN	Latitude	minutes
LONDEG	Longitude	degrees
LONDIR	Longitude direction (W=West)	
LONMIN	Longitude	minutes
MONTH	Month	
NH3N	Ammonia Nitrogen	mg/L
NH4	Ammonia Nitrogen Flux	μg-at/m^2 per hour
NO2	Nitrite Nitrogen Flux	μg-at/m^2 per hour
NO3N	Nitrate Nitrogen	mg/L
NO3NO2	Nitrate-Nitrite-Nitrogen Flux	μg-at/m^2 per hour
PH	pH	pH units
PO4	Ortho Phosphate Flux	μg-at/m^2 per hour
RECOV	Percent Recovery	
REP	Sample Replicate	
ROUND	Sampling Round	
SALINITY	Salinity	ppt
SAMVOL	Pre-spike Sample Concentration	
SECCHI	Secchi Disk Transparency	m
SI	Silica Flux	μg-at/m^2 per hour
SOC	Sediment Oxygen Consumption Rate	μg-at/m^2 per hour
SPCOND	Specific Conductivity	uS
SPKAMT	Effective Spike Concentration	
SPKVAL	Concentration of Sample	
SPLIT	Laboratory Replicate Number	
STATION	Station Name	
SULFIDE	Sulfide	ppt
TC	Total Carbon	mg/L
TDC	Total Dissolved Carbon	mg/L

TDP	Total Dissolved Phosphorus	mg/L
TEMP	Water Temperature	degrees C
TIC	Total Inorganic Carbon	mg/L
TIME	Time of Day	military time
TKN	Total Kjeldahl Nitrogen	mg/L
TOC	Total Organic Carbon	mg/L
TP	Total Phosphorus	mg/L
TSS	Total Suspended Solids	mg/L
TURB	Turbidity, Nephalometric	NTU
TYPE	Type of Sample Observation (1=routine; 2=storm)	
VSS	Volatile Suspended Solids	mg/L
YEAR	Year	

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The water quality of the San Juan Bay and Estuary system, Puerto Rico, has been markedly impacted. These impacts include high bacteria levels, low dissolved oxygen, eutrophication, and the presence of toxic materials. This report describes data collection efforts in support of a water quality modeling initiative designed to evaluate management alternatives. Data collection efforts included tributary sampling, water column sampling, and estimation of sediment/water fluxes using microcosms. Data are presented in appendixes.

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